Hawai‘i State Department of Health Alcohol and Drug Abuse Division State Plan

Intersections of Substance Use Among Public Sectors and Health Disparities Populations: Implications for a System of Care

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Please direct questions and comments to onoyej@dop.hawaii.edu

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The recommendations from the ADAD State Plan System of Care Implications disseminated here are the views presented by the authors and do not necessarily represent the views of the sponsoring or partnering agencies.

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An Introduction to the System of Care Implications Volume of the ADAD State Plan

Substance use is a significant health problem in Hawai'i, and solutions primarily come under the purview of the Hawai'i State Department of Health, Alcohol and Drug Abuse Division (ADAD). However, substance use is an important consideration among many public sector services and disproportionately impacts specific populations in our state. Therefore, ADAD has updated its State Plan to highlight the intersection of substance use and public sectors and susbtance use and health disparity populations. The State Plan is meant to serve as a blueprint and reference document so that local and state organizations have a framework for centering substance use in their future action. By taking an intersectional approach to its State Plan, cross-sector and population specific strategies may be implemented prospectively. Through a relational design strategy with the University of Hawai'i Department of Psychiatry, John A. Burns School of Medicine, local professionals statewide from a variety of public, private, and community-based entities have contributed their subject matter expertise to author these intersectional areas in the state plan. By leveraging the wisdom of our local practitioner and scholar experts, we aspire to elevate community voice – both the clients and their families, as well as the professionals.

The State Plan project spanned the period of 2019-2022 and consisted of four cores, each with its own emphasis – the Data Analytics Infrastructure Core, the System of Care Implications Core, the Emerging Adult Treatment Core, and the Culture Case Study Core. The System of Care Implications Core coordinated the intersectional chapters of the State Plan project which are presented here in this volume. The Data Analytics Infrastructure Core contributed to the establishment of the Hawai'i Behavioral Health Data Dashboard and the State Plan Statistical Report. The Culture Case Study and Emerging Adult Treatment Cores focused on emerging issues with youth and young adult substance use prevention and treatment & recovery. The respective reports for the latter three cores are available on the Department of Health ADAD website at https://health.hawaii.gov/substance-abuse/survey/.

As the work on developing the State Plan evolved, it became evident that there were few authoritative sources in the existing literature that bridged research and practice-based knowledge to make recommendations around these important intersections. The focus of the chapters here is to highlight the intersection of substance use and public sectors and populations, specifically in the context of Hawai'i's systems of care. Notably, the public sector systems of care are not merely healthcare systems, but also broader systems that serve populations of differing needs and reflect much diversity. The System of Care Implications chapters reflect the intersection of substance use and the public sector (mental health, homelessness, criminal justice, juvenile justice, and child abuse and neglect), as well as substance use and health disparity populations (Native Hawaiian, sexual and gender minorities, rural, pregnant and parenting populations). Alongside the foci on the intersections of substance use, issues in primary care integration are discussed around cross-cutting initiatives with the

potential to improve public sectors and health disparity populations with the integration of substance use specialty care in Hawai‘i’s primary care settings.

The chapters of the State Plan System of Care Implications volume each: (1) includes highlights of relevant literature and describes available Hawai‘i-specific data, (2) offers expert practitioner and scholar insights around the current system of care from practice-based knowledge, (3) relates appropriate evidence-based interventions or innovative approaches relevant for Hawai‘i, and (4) synthesizes the aforementioned to offer observations and recommendations around implications for the systems of care in Hawai‘i.

The literature review method for the development of each manuscript entailed a comprehensive initial review beginning 2020 by the System of Care Implications team around the current literature, using PubMed, PubMed Central, and Google Scholar or other database searches with key index terms respective to each topic. After screening record abstracts for relevance to substance use and systems of care in Hawai‘i, a set of full-text articles was reviewed further. Relevant articles were selected for inclusion in an initial literature review package, along with an annotated bibliography, which was given to each of the manuscript lead authors. After the authors received the literature reviews, they also were able to add to it based on their subject matter expertise, either on their own or with assistance from the System of Care Implications team. Additional searches or scoping reviews of the literature were conducted as needed, or when recommended by external reviewers.

Available data systems were examined, including those developed by the Data Analytics Infrastructure Core, to describe primary issues or problems in substance use and related systems of care. These were most often publicly available data from the literature, technical reports, or accessible databases; but in some cases, stakeholder organizations granted permission to include the sharing of available aggregated data statistics, quality improvement data, or data from non-published internal reports. Where data were unavailable or inaccessible, recommendations around these gaps were often noted.

The current systems of care for each intersection topic are described to illustrate where individuals may be accessing services, or conversely where linkages across systems are absent. Descriptions around the current system of care may include levels of care, examples of intervention models or modalities, or specific examples of service providing organizations or programs in the state.

Among interventions discussed are evidence-based practices from the literature and community-driven practice-based evidence which are highlighted along with innovative approaches for Hawai‘i. In some instances, these evidence-based practices or adapted approaches already may be implemented in Hawai‘i, in spite of few published studies that distinctly demonstrate their effectiveness in Hawai‘i populations. Given the deep cultural contexts of our populations, particularly for Native Hawaiians, recognition of innovative interventions or approaches are also discussed. The inclusion of innovative approaches was also purposeful, as ADAD has

expanded the opportunity for funding these types of prevention and treatment services into the systems of care.

Finally, in each chapter, observations and recommendations for systems of care implications in our state are offered. These recommendations are based on the subject matter expert's perspectives from having synthesized knowledge from both the literature and from practice, which includes feedback from a variety of stakeholders such as ADAD, substance use treatment providing organizations, and individuals who may have lived experiences around the intersections in the systems of care. In this way, it is hoped that the community voice is reflected in guiding potential future directions of state and community level efforts to address substance use from an integrated behavioral health perspective in practice and policy.

We wish to acknowledge support for the writing and coordination of the System of Care Implications project for the State Plan was provided by the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD). Special thanks and appreciation are especially given to the State Plan System of Care Implications Project Study Manager, Yoko Toyama Calistro, and graduate assistant Jin Young Seo for their tireless dedication and immense effort in support of the coordination and technical support of the special supplement. Mahalo nui loa to the students and staff who helped to support the work of the State Plan project since its inception: Suzy Bruno, Alex Nakamoto, Ishmael Gomes, and Cade Akamu. Mahalo to Stephen Geib of the Data Analytics Infrastructure Core for his support in connecting available data for the authors of the System of Care Implications chapters. Mahalo to the Pacific Health Analytics Collaborative for developing and sharing the Hawai'i Behavioral Health Dashboard which provides public health surveillance data relevant to substance use in Hawai'i. We also thank the many individuals and stakeholder groups that have provided their mana'o and have graciously offered feedback on the various chapters of the State Plan throughout this process. We hope that this State Plan offers opportunities for strengthening and creating new partnerships and collaborations in the statewide efforts to improve the systems of care for substance use in Hawai'i.

Mahalo nui loa,

Jane Onoye, Susana Helm, John Valera, and Jared Yurow

Establishing a System of Care for Severe and Refractory Dual Disorder in the State of Hawai‘i

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Abstract

Dual disorder is the comorbidity of a substance use disorder and psychiatric disorder. These disorders have a particularly pernicious effect as co-occurring. Increasing understanding of the unique and problematic aspects of the dual disorder can provide directions for intervention and policy within the system of care in Hawai‘i. This chapter focuses on the cohort of individuals with severe and refractory dual disorders because of their disproportionately high use of emergency services, poor response to traditional care resources, high rates of homelessness, and shortened life expectancy. Survey data on dual disorder prevalence in Hawai‘i are discussed. In addition, Hawai‘i data on emergency room utilization, violent deaths, and homeless deaths are introduced. The current system of care in Hawai‘i is examined, and the O‘ahu Community Correctional Center, which is not available to the public, is noted as a model for long term stabilization for severe dual disorders. Interventions from the literature for severe and refractory dual disorders are discussed. Based on the examination of effective interventions in the current system of care and from the literature, the following recommendations are made: (1) specific dual disorder diagnosis and data collection endeavor, including stratification of dual disorder severity, (2) enhanced coordination across different public sectors, (3) extended care environment that makes long term and integrated treatment available, (4) enhanced case management service to help with patient engagement, and (5) discussions on civil commitment (court-ordered substance use disorder treatment).

Background & Introduction

Purpose

The aim of this chapter is to provide recommendations for the system of care for severe and refractory dual disorder in the State based on knowledge of the properties of dual disorder and examinations of effective interventions in the current system of care and from the literature. We have decided to focus on the cohort of individuals with severe and refractory dual disorders because of their disproportionately high use of emergency services, poor response to traditional care resources, high rates of homelessness, and shortened life expectancy. There is an urgent need for a system of care that can save their lives.

Definition & Prevalence

Dual Disorder is the co-occurrence of more than one condition in the same person. In a patient with "a particular index disease (the primary diagnosis of the dual disorder), the term co-morbidity refers to any additional co-existing ailment."[1] The terms co-morbid disorders, co-occurring disorders, and dual disorders are used interchangeably. The World Health Organization (WHO) defines dual disorder as: "the co-occurrence in the same individual of a psychoactive substance use disorder (SUD) and another psychiatric disorder."[2] In addition, since 2012, the World Psychiatric Association (WPA) has designated a new section for this issue and has chosen to use the term "dual disorders/pathology."[3] The term "dual disorder" will be used herein due to its standardized global use by the WHO.

According to the National Survey on Drug Use and Health, 17 million Americans have dual diagnosis, with 47% of individuals with a mental illness having a substance use disorder, and 80% of individuals with an SUD having a mental illness.[4] This indicates dual disorder occurs frequently enough to be considered the expectation more than the exception.[5] For example, individuals with schizophrenia were more than 5 times more likely to have an SUD and individuals with bipolar disorder were 11 times more likely to have an SUD, compared to those without mental illness.[5] The odds of a psychotic disorder occurring in a daily cannabis user are 3.2 times greater than for one who has never consumed cannabis.[6] In addition, more than 75% of patients in treatment for a cannabis use disorder have a dual disorder, predominantly mood and anxiety disorders.[7] The most common dual disorder is SUD comorbidity with major depressive disorder. Compared to those with SUD only, those with SUD and major depression show a worse quality of life, overall health and vitality.[8]

Properties of Dual Disorders

Protective conditions include strong familial, peer, and community connections. Early detection and treatment of mental illness and/or substance use reduces risk as well. Finally, having access to evidence-based mental health and substance use prevention and treatment services decreases hospitalizations, treatments, and emergency room (ER) visits.[9,10]

Dual disorders may interact in a synergistic negative fashion, making one, the other, or both worse. The understanding of this concept is crucial in the development of policy and the allocation of resources, especially with the recognition that dual disorders may not necessarily be the combination of costs of the management of two separate illnesses.[11] Dual disorders have a more complicated natural history punctuated by more frequent recurrence and relapse than either substance use or mental health disorders alone. Suicidality and increased mortality are accompanied by more family, social, employment, and educational dysfunction.[12] Unstable housing and homelessness may intercede, as well as an increase in violent behaviors, legal problems, and incarceration.[12] Health care utilization may be increased, in terms of hospital days, ER visits, municipal emergency services in the form of MH-1s (involuntary application for mental health evaluation by the police), and increased use of substance abuse and mental health services.[13]

Dual disorder patients are generally underdiagnosed and undertreated. Service gaps are present between the need for substance use disorders and mental disorders treatment, and care delivery.[12] Salloum and Brown[13] note that patients with dual disorders experience an earlier onset of their index disease, have more severe disease manifestation, experience diagnostic confusion in their treatment providers which can delay treatment, and exhibit impaired response to treatment. Substance use disorder is a contributor to the reduced life expectancy in those with mental health disorders.[14] Index substance use disorder and a comorbid mental disorder show more ER visits and hospital admissions, significantly increased rates of psychiatric hospitalization, and a higher prevalence of suicide than their cohort without comorbid mental disorders.[12]

"Wrong Door Syndrome"

The "wrong door syndrome"[12,15] is a notion that helps in understanding the limitation of dual disorder treatment when triaged for substance abuse and/or mental health care in the State. The wrong door syndrome can occur when a dual disorder patient is managed in a psychiatric environment in which SUDs are not properly diagnosed or treated. It can also happen when a dual disorder patient is in a SUD treatment environment that lacks diagnostic and/or treatment services in the areas of psychiatric disorders. For example, while patients suffered from SUDs and mental illness, and needed appropriate treatment program for them, only 50% of SUD treatment facilities provided customized treatment programs for dual disorders in 2018.[16]

Wrong door syndrome may also occur in research studies in which one or the other disorder is excluded. As a result, results on evidence-based treatments for dual disorders may be lacking. The treatments for SUDs and psychiatric disorders arose separately and distinctly, along completely different historical lines, contributing to the lack of effective combinations.[12]

Dual Disorders in Hawai'i

The National Survey on Drug Use and Health 2018-2019 Hawai'i data[17] provides estimates of the percentage of people who have dual disorders in the State of Hawai'i. Table 1 illustrates the percent of reported past year mental illness (any mental illness and serious mental illness) by substance use. This data shows that 5.6% of Hawai'i population used both drug and alcohol and had any mental illness in the past year. Significant relationships exist in each of the five pairs of mental health and substance use variables. However, since these findings are based on a household survey, selection bias may pose a barrier to capture the disease burden for those homeless, hospitalized, or incarcerated.

Table 1. Past Year Mental Health Indicator by Illicit Drug and Alcohol Use from The National Survey on Drug Use and Health 2018-2019,[17] Hawai'i Data

The National Survey on Drug Use and Health 2018-2019 Hawai'i data			
Illicit Drug and Alcohol Use - Past Year		**No Past Year *Any* Mental Illness**	**Past Year *Any* Mental Illness**
No drug or alcohol past year use	Total %	70.1%	12.3%
	Row %	85.1%	14.9%
Both drug and alcohol past year use	Total %	12.0%	5.6%
	Row %	68.0%	32.0%
Illicit Drug and Alcohol Use - Past Year		**No Past Year *Serious* Mental Illness**	**Past Year *Serious* Mental Illness**
No drug or alcohol past year use	Total %	79.8%	2.5%
	Row %	96.9%	3.1%
Both drug and alcohol past year use	Total %	15.8%	1.8%
	Row %	89.5%	10.5%
Marijuana Dependence - Past Year		**No Past Year *Any* Mental Illness**	**Past Year *Any* Mental Illness**
No/Unknown	Total %	81.5%	16.9%
	Row %	82.9%	17.1%
Yes	Total %	0.5%	1.1%
	Row %	32.9%	67.1%
Nicotine Dependence		**No Past Year *Any* Mental Illness**	**Past Year *Any* Mental Illness**
No/Unknown	Total %	78.9%	16.2%
	Row %	82.9%	17.1%
Yes	Total %	3.2%	1.7%
	Row %	65.3%	34.7%
Nicotine Dependence		**No Past Year *Serious* Mental Illness**	**Past Year *Serious* Mental Illness**
No/Unknown	Total %	91.4%	3.7%
	Row %	96.1%	3.9%
Yes	Total %	4.2%	0.7%
	Row %	85.8%	14.2%

Because data on people with severe and refractory dual disorders in the State were limited, we have approached a variety of agencies within the State to obtain relevant data. We obtained data via personal communications with The Queen's Medical Center Hyperutilizer Team,[18] Dr. Daniel Galanis of the Hawai'i State Department of Health,[19] and from Dr. Masahiko Kobayashi of the Department of the Medical Examiner, City and County of Honolulu.[20] The following paragraphs are descriptions of data that were used with permission.

Data from hospitals demonstrate the prevalence of severe and refractory dual disorders in the State, the focus of this paper. Within the population of dual disorder patients in the State, there appears to be a small but notable subpopulation using the highest level of emergency resources. The Hyperutilizer Team at the Queen's Medical Center selects the patients who have the greatest ED utilization, examines the causes of their need for their frequent ED visits, and proposes solutions to reduce these needs. According to The Queen's Medical Center Hyperutilizer Team,[18] there are 15 patients who made 718 ER visits in 2021. Of these 15 people, 66.67% had substance use disorder, 93.33% had behavioral health problems, and 66.67% were experiencing homelessness. 60% of these 15 hyperutilizers had both SUD and behavioral health problems. Moreover, 53.33% of them fell in all three categories: had SUD and behavioral health problems and were experiencing homelessness. This shows that frequent and recurrent use of ER services suggest that traditional treatment does not work well for patients with refractory dual disorders, such as these cohorts with dual disorders, or dual disorders with homelessness. Also, this cohort is characterized by the highest utilization of emergency resources, including ambulance arrivals and MH-1s. One hyperutilizer on average accounted for 47.87 ER visits, 21.67 ambulance arrivals, and 2.53 MH-1s. These numbers are much higher than those for general ER patients; one ER patient on average accounted for 1.61 ER visits, 0.43 ambulance arrivals, and 0.03 MH-1s. From these numbers, we can infer that the treatment that this population is receiving is not working for them and is costing a lot of money.

The State's violent death data enables us to see how common dual disorder is among decedents and homeless decedents. The National Violent Death Review System (NVDRS) is an investigation of violent deaths. The NVDRS Hawai'i data from 2015 to 2019 (with incomplete completion for years 2017-2018)[19] revealed that among 85 homeless decedents in the data, 20 (23.5%) had dual disorders, whereas among 1,110 non-homeless decedents, 129 (11.6%) had dual disorders. We can see that dual disorder is relatively common among decedents and homeless decedents in the NVDRS Hawai'i data.

From medical examiner data, we can infer the life expectancy of people with refractory dual disorder. Medical examiner data from the City and County of Honolulu[20] shows a reduced life expectancy in the 6th decade of life in the homeless population, resulting primarily from overdose or infection/sepsis. Medical examiners' review of 109 deaths of homeless individuals in 2020 revealed that 62 were positive for methamphetamine, 7 for fentanyl, 0 for cocaine, and 3 for heroin.[20] This means that homeless people in the City and County tend to die in their 50's, when Hawai'i residents live 80.9 years on average.[21]

Limitations of Data Sampling

There is a significant lack of data on severe and refractory dual disorders. Homelessness with dual disorders creates bias in household survey data collection such as the National Survey on Drug Use and Health, the only survey data available for dual disorders in the State. Since precise data are not available, reliance on anecdotal and/or approximate data is the best that can be done at the moment.

Significant heterogeneity exists in data samples regarding dual disorders. Part of the difficulty lies in diagnostic uncertainty, whether psychiatric symptoms are drug-induced or a manifestation of a dual disorder. Data interpretation is also confounded by the absence of standardized testing in clinical settings, the lack of diagnosis of SUDs not perceived as contributing to acute psychiatric conditions, such as tobacco use disorder. Finally, patients admitted for primary medical disorders may not be diagnosed with a co-existing substance use disorder, as it may be perceived to be non-contributory to the acute medical management, such as methamphetamine use disorder history in the context of acute congestive heart failure. Without accurate State data on dual disorders, measurement of any public health interventions will not be possible.

Current System of Care in Hawai‘i

Hawai‘i is fortunate to have a state intake system for evaluation and disposition for substance abuse treatment, Hawai‘i Coordinated Access Resource Entry System (CARES), as well as a spectrum of SUD and psychiatric treatment services.

The “system of care” in Hawai‘i, like most states, is a patchwork collection of public and private treatment resources. The following information about O‘ahu has been compiled by one of the authors, who works in the Queens Medical Center Psychiatric ER. Starting there, dual disorder care inquiries were made. Department of Health personnel in the Adult Mental Health Division and Alcohol and Drug Abuse Division were surveyed. In this fashion, a survey of available care for psychiatric and substance abuse, as well as dual disorder patients was assembled. The resources are:

(1) Outpatient fixed ambulatory, as well as limited mobile, assessment, and treatment services. Some of these outpatient providers treat dual diagnosis, while others are psychiatric only. Providers at this level of care include Hawai‘i Health & Harm Reduction, the Institute for Human Services, Po‘ailani Inc., and Queens Counseling Center. In addition, there are a number of private providers of these services. Although there are levels of care of increasing structure, these outpatient providers are “ground zero” for engaging and managing those patients with the greatest severity of dual disorders for the State
(2) Intensive Outpatient Treatment for either or both dual disorders
(3) Partial Hospital Program for either or both disorders
(4) Short term residential treatment for SUD only, may recognize need for mental health treatment

(5) Longer term treatment (Sand Island) for SUD only
(6) Inpatient, for mental health disorders only, may be a mental health disorder resulting from SUD

In every one of these levels of care, the patient can leave treatment after signing the appropriate forms, except for #6, they may be committed involuntarily. It should be noted that Hawai'i State Hospital is not available for public use or use by dual disorder cohort without legislative change.

A list of resources for psychiatric and substance use disorders (among others) for Honolulu, Hawai'i, Kaua'i, and Maui Counties was created by the Hawai'i Opioid Initiative.[22] In general, the resources are listed separately as mental health resources or psychiatric resources, illustrating the artificial separation of services discussed in the chapter regarding resources for dual disorder patients. Even when a listing makes reference to dual disorders, such as the "CARE Hawaii Inc, Honolulu Care Dual Diagnosis IOP," services are listed separately without any indication if the services are integrated or how they might be synthesized for patient benefit.[22] Other examples of "dual disorder treatment" include Lokahi Treatment Centers[23] in Hawai'i County, which does "anger management" in addition to SUD treatment; Ho'ola Lahui Hawai'i on Kaua'i, which does not provide integrated services; and the Community Clinic of Maui, which provides harm reduction services, substance abuse treatment, and anger management. There is no long-term treatment, compulsory or non-compulsory, for dual disorders (or severe and refractory dual disorders) on neighbor islands.

An important element in the system of care in the state is the O'ahu Community Correctional Center (OCCC). Because one of the authors is also site director for residency training in forensic psychiatry, the available psychiatric and dual disorder care was surveyed. OCCC operates under the Department of Public Safety but provides a missing piece in the system of care, a longer-term recovery setting, in addition to a psychiatric intensive (Module 1), subacute (Module 2) and residential (Module 11) level of care, as well as all-encompassing women's services on Module 8, for pre-trial detainees. We discuss OCCC as a model of care because all other community correctional centers send individuals with difficult dual disorders to OCCC, as it has the four mental health modules. Each module is a self-contained detention and psychiatric treatment environment, designed to manage the level of acuity in terms of staffing. For example, Module 1 houses acutely suicidal or imminently violent patients and has appropriate infrastructure for suicide prevention (such as safety nets along the second-floor balcony, ligature resistant clothing for acutely suicidal patients, 1:1 staffing).

Although Hawai'i, Kaua'i, and Maui Counties each have a pre-trial detention center like OCCC (Hawai'i, Kaua'i, and Maui Community Correctional Centers, respectively), they do not have separate mental health modules like OCCC. Complex patients with difficult conditions are transferred to OCCC due to the relative abundance of psychiatric resources at OCCC.[24]

OCCC provides a model of involuntary treatment for people with dual disorders. Although not available electively to the public, when a dual disorder patient is incarcerated in this facility and has psychiatric acuity, they are able to remain in this care system much longer

than any available component in the above list of services. According to one of the authors' personal observations as the director of medical education and patient care for the University of Hawai'i Department of Psychiatry at OCCC, while prevented from being on the streets or other environmental adversity, as well as provided with food, medication, safe environment, clothing, and sanitation, there is an opportunity for their condition to improve and to obtain further diagnostic distinction, far beyond that offered by all other levels of available care, including American Society of Addiction Medicine (ASAM) levels 0-5 and psychiatric hospitalization.

Entry Points into the Current System of Care for Severe and Refractory Dual Disorder Patients

Currently, there are two main entry points into the system of care for severe and refractory dual disorder patients. Figure 1 illustrates how patients with severe and refractory dual disorders enter the system of care but do not get adequate treatment. One of the authors who works in the Queens Medical Center Psychiatric ER, collected the following information through personal observations.

The most common path into the system of care is through the Queen's Medical Center Psychiatric ER, where patients often arrive involuntarily on MH-1s. On average, patients stay in the ER for 16 hours. During the brief stay, patients get stabilized for intoxication, suicidal ideations, and/or homicidal ideations. When they leave, patients are placed in the current system of care, which is not capable of adequately treating the severe and refractory dual disorders. The patients typically leave the system of care in less than 72 hours; many go back to homelessness and drug use.

The second entry point into the system of care is forensic; some patients (estimated 5 to 10%) get arrested and are placed into the OCCC's mental health treatment modules as pre-trial detainees. OCCC provides patients with a safe, structured, and drug-free environment, as well as mental health services. The average length of stay at OCCC is between 6 months to 2 years. During this time, some patients start to recover. However, when they have the leave, many of them go back to being homeless, and start using drugs again. Some of them are placed in the current system of care, which is not capable of adequately treating the severe and refractory dual disorders. The patients typically leave the system of care in less than 72 hours; many go back to homelessness and drug use.

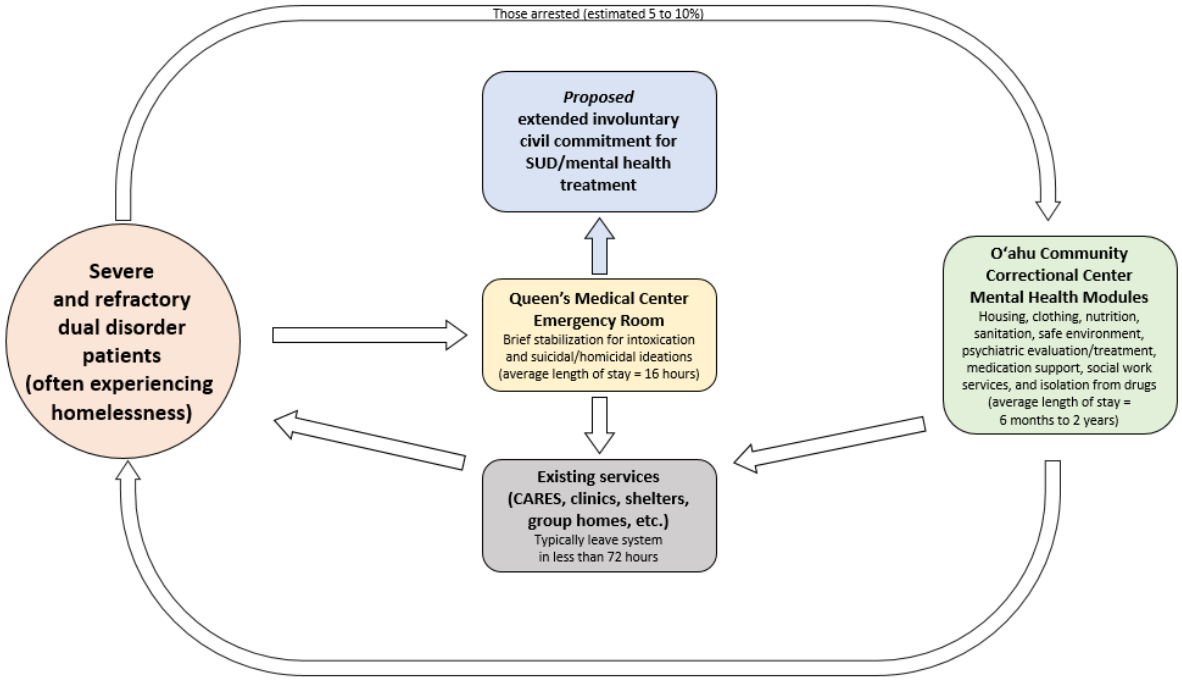

Figure 1. Entry Points into Hawai'i's Current System of Care for Severe and Refractory Dual Disorder Patients

These exits from the system of care tell us that severe and refractory dual disorder patients are not being adequately served by the current system of care. Therefore, we propose extended involuntary civil commitment for SUD and mental health treatment, which does not exist in the current system of care (the area in light blue in Figure 1). Having observed that the safe, structured, and drug-free environment of OCCC can lead to recovery for severe and refractory dual disorder patients, it would be worthwhile to expand it outside of the criminal justice system, and to add SUD treatment (in addition to the mental health services). We will elaborate further on civil commitment with existing literature in the following section.

Challenges

One of the most fundamental problems of the current care delivery system, modeled after the traditional complaint-driven presentation to a clinic or hospital, is the notion that the patient must present to treatment to prove that they are motivated for treatment. However, dual disorder patients are unlikely to either present to treatment on their own, or to benefit from either substance abuse or psychiatric treatment alone,[25] until advanced disease with compelling consequences occurs, such as criminal arrest, MH-1, or serious medical complication.

An additional challenge within the multi-sector care systems is the lack of a uniform data system or governance exists for data collection, prevention, identification, and/or management of dual disorders in the State of Hawai'i. Since a large number of individuals with refractory dual disorders are not captured in household surveys, an effort to collect data should include those who are homeless, in hospital, or in correctional facilities or the criminal justice system.

Finally, the disadvantage of the correctional center is that although there are groups and activities, there is no SUD treatment or relapse prevention work. There remains a disconnect in the transition from OCCC to the community, in that restoration of services and connection with previous care is not predictable or built into the system. Overall, however, the correctional center provides a model for longer-term stabilization component for dual disorder patients, a missing piece in the system of care for the state, ironically under the aegis of the Department of Public Safety, rather than the Department of Health, and limited in the population served to pre-trial detainees only.

Interventions from the Literature

Improving Diagnosis

It is beneficial to clearly define and differentiate types of dual disorders to capture the heterogeneity of each subtype. Different subpopulations of dual disorders may have different properties. The combinations of methamphetamine and psychosis, of opioids and depressive disorders, and alcohol and anxiety disorders are heterogenous.[25] Aggregating all cases and combinations of SUD and psychiatric disorders may not provide as much guidance as clearly defined study populations.

Improving Care Delivery

A "no wrong door" policy must be instituted to prevent the negative impact of "wrong door syndrome" on dual disorder patients.[16] Hawai'i's efforts to create such a portal through Hawai'i CARES is admirable, as it provides an invaluable service to all who are able to call for referral. There is support for integrated treatment of dual disorders in the literature. A recent review of best practices indicates that integrated treatment of dual disorders (combining treatments) is more effective than sequential treatment (treating one of the two disorders first and then the second).[26] Unfortunately, integrated dual disorder treatment continues to be rare.[26] Higher-functioning patients may require less integration of services, so "staging" the dual disorder may benefit determining the level of integration of the separate services. For example, a patient with a methamphetamine toxidrome may require the highest level of integration of psychiatric, substance use disorder, and medical services due to acuity and severity of impairment. Similarly, a patient with alcoholism and autistic spectrum disorder may require a similarly high level of integration of services.[26]

The advent of case management has changed the equation with regard to success in entering treatment as well as in treatment retention. Case management is an essential element for dual disorder patients, providing a lifeline for continuity of care as well promoter of treatment engagement and adherence.[25] Case management can be used to engage a patient who is otherwise reluctant to enter/continue treatment.

Research suggests that drug addiction treatments should be a long-term process and that treatment can be effective even when it is not voluntary.[27] According to the National Institute on Drug Abuse,[27] at least three months of time in treatment is needed to reduce or cease substance use, and longer durations tend to yield desirable outcomes. Moreover,

it is acknowledged that involuntary (compulsory) treatment, such as those at correctional facilities, can be effective. One characteristic of patients with severe and refractory dual disorders is that their decision-making ability may be impaired. From such individuals, obtaining meaningful consent is often implausible.[28] Knowing that the life expectancy is short among those with dual disorders,[14] it appears worthwhile to continue discussions on the matter of civil commitment,[28] in research, legal, and policy arenas. Civil commitment is civil court-ordered involuntary treatment, which is available currently for mental health in the State but not for SUD.

Recommendations

The following recommendations were based on the literature and conversations with stakeholders. The conversations with stakeholders include monthly meetings with the Deputy Director of Behavioral Health Division at the Department of Health, Marian Tsuji and with the ADAD director John Valera. At Queen's Medical Center, one of the authors have had regular meetings with Danny Cheng, Medical Director of the Emergency Room, and monthly meetings with the Queen's Medical Center Hyperutilizer Team. In addition, he also had monthly meetings with the advanced practice registered nurses at the Queen's Medical Center – West O'ahu. Finally, one of the authors participated in monthly discussions with mental health emergency workers, which includes various emergency treatment providers. As the focus of this chapter is separate from the goals of these meetings, the attendees at these meetings were not specifically polled about the following recommendations. However, the recommendations offered here represent the authors' synthesis of inquiry on the problem and interventions from the literature, relevant Hawai'i specific data, extensive practice-based knowledge, and input from a range of stakeholders from among intersections in the system of care.

Below are the five recommendations for the State's system of care for patients with severe and refractory dual disorders:

(1) **Specific dual disorder data collection endeavor, including stratification of dual disorder severity.** This will require state-wide standardization of health data, including all medical hospitals as well as psychiatric units, residential treatments, partial hospitalization programs (PHPs), intensive outpatient programs (IOPs), outpatient services, and case management services. Data collection needs to be standardized throughout the system of care and this would include different public sectors.

(2) **Enhanced coordination across different public sectors, including the Department of Health, Department of Public Safety, and Department of Human Services.** Dual disorder-related public functions are scattered across many divisions of the government. The structure of these various divisions needs to be partly modified to better serve dual disorder patients. The structure should be set up with a "no wrong door" policy in mind, so that referrals to appropriate services can be made in a timely and seamless manner. A "no wrong door" policy would be to prevent dual disorder patients from progressing to severe dual disorder.

(3) **Extended care environment.** Long term and integrated treatment for dual disorder should be made available.
(4) **Enhanced case management service.** Case management should be in place to help patient engagement before, during, and after treatment.
(5) **Research, legal, and policy discussions on civil commitment.** Data demonstrating high psychiatric ER utilization and increased mortality from the medical examiner's office can help substantiate legislation supporting a greater than or equal to 6 months period of involuntary residential confinement for treatment (the light blue area in Figure 1). Although this may be seen as a potential infringement of liberty, the life-expectancy data may help demonstrate the necessity for this intervention.

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Housing First: The Effectiveness of Harm Reduction at the Intersection of the Substance Use and Homelessness Systems of Care

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Abstract

Despite a considerable overlap between people experiencing homelessness and people living with substance use disorder, there is a marked lack of integration between Hawai'i's systems of care for these populations. This gap in the current system of care often creates barriers to services for those living at the nexus of homelessness and substance use. This chapter describes Hawai'i's current homelessness and substance use systems of care, paying particular attention to the intersection between these two systems. With Hawai'i consistently ranking among the highest per capita rates of homelessness in the United States, we argue that the intersection of homelessness and substance use is a pivotal site of intervention for addressing significant social problems. We position the Housing First paradigm as a critical model for bridging gaps and eliminating barriers in service provision through systems integration at the program level. Greater fidelity to the broader harm reduction principles underlying this model will effectively organize and equip programs to successfully address the needs of people experiencing homelessness and struggling with substance use.

Background & Introduction

Scope, Significance, and Prevalence

For people experiencing homelessness (PEH) and struggling with harmful substance use or substance use disorder (SUD), a lack of integration between Hawai'i's homelessness and substance use systems of care (SoCs) presents consistent barriers to effective service provision. For example, participation in residential treatment programs may disqualify a person seeking housing assistance from accessing permanent housing support; or a housing program may exit a housed individual for recurrent substance use. With Hawai'i consistently ranking among the highest per capita rates of homelessness, the intersection of homelessness and substance use is an increasingly pivotal site of intervention. This chapter discusses that the Housing First paradigm represents the most promising solution to addressing homelessness and substance use, and that greater fidelity to the Harm Reduction principles underlying this model will be most effective in organizing successful programs. Building on the humane spirit of Housing First, which aims to provide permanent supportive housing without preconditions of sobriety or treatment participation, this paper asserts that PEH and SUD have the right to housing regardless of problematic substance use.

Data from Hawai'i's 2020 Point in Time Count shows that on a single night in 2020, there were approximately 4,448 individuals experiencing homelessness on O'ahu and 2,010 individuals on the neighbor islands.[1] Of those counted, 683 (18%) indicated harmful substance use on O'ahu and 460 (28%) on the neighbor islands. Compared to neighboring islands, substance use was slightly more represented among both sheltered (350 or 24%) and unsheltered (333 or 27%) populations on O'ahu.[2] Approximately one in five PEH on O'ahu reported problematic substance use as a cause of homelessness, making it the third most common self-reported cause of homelessness (15% of respondents), behind an inability to pay rent and the loss of employment. These findings are consistent with other populations experiencing homelessness in comparable municipalities on the continent.

Current data and the historic persistence of homelessness within our continuum of care suggest that ongoing economic and structural forces are an important cause of homelessness and the trauma experienced when living on the street.[3-5] When 'loss of money' is combined with other self-reported causes of 'inability to pay rent' and 'loss of employment', these economic causes outweigh alcohol and drug use 3 to 1 (44% vs 15%). Understanding these structural and economic roots of homelessness, this chapter argues for structural solutions that meets clients with compassion and support rather than moralizing or stigmatizing problematic behavior. In lieu of sweeping economic reforms like affordable housing and living wages, the existing SoCs can be

fortified to better meet the needs of PEH. While remaining recovery oriented, Housing First better retains clients in care and provides more effective treatment because it does not require sobriety or penalize relapse, thus accommodating the fluctuating position of clients along the stages of change. As illustrated in the description of our current SoC, Housing First has been a successful intervention thus far, and would benefit from being scaled up to fully meet the need for all those who are qualified. Programs can also increase fidelity to Harm Reduction principles by addressing both individual and social levels of trauma, integrating the substance use and homelessness SoCs, and helping clients to maintain eligibility for supportive services throughout their journey of care.

By building upon and expanding the current Housing First model in Hawaii, a more responsive SoC can be designed to address substance use and homelessness, and is flexible enough to accommodate the chaotic behavior that often accompanies problematic SUD while retaining participants in care. The chapter begins by briefly sketching some of the intellectual frameworks informing the perspective taken here. The Social-Ecological Model (SEM) is particularly useful in allowing us to understand this complex issue as affecting both individual and community levels of analysis. We then describe the current SoC for PEH and SUD in Hawai'i, with particular attention to the intersection between the two systems and with Housing First as the key site for integration. Finally, the chapter outlines several interventions which would improve services provision by adhering more closely to the principles of the Harm Reduction approach to public health.

Theoretical Frameworks

The SEM understands individual behaviors like substance use as embedded within complex social and political networks. **While treatment of SUD remains focused on the individual level, SEM considers individual health within the context of larger social forces that provide leverage points for effecting change**. On the individual level of the SEM, existing literature examines the prevalence of co-morbid mental health conditions among PEH. Conditions include alcohol-related problems,[6,7] co-occurring serious mental illness, and other psychiatric illness.[7,8] PEH have higher rates of tuberculosis, hypertension, asthma, and HIV/AIDS than the general population.[9-11] PEH also have higher rates of infectious disease due to compromised immune systems.[12] Childhood trauma increases the risk for adverse health outcomes according to research involving adverse childhood experiences (ACEs). When utilizing the 10-question ACE survey, people with four or more ACEs are two to five times as likely to develop clinical depression, SUDs and homelessness compared to those with no ACEs.[13] Locally, the ACE survey was administered to 100 people who inject drugs through Hawai'i's syringe exchange program, and 63.5% had an ACE score of 4 or higher.[14]

On the community level, homelessness has been identified as a significant risk factor for large injection networks.[15] Kennedy et al[16] note social network

intervention may efficaciously impact readiness to change alcohol and other drug (AOD) use and AOD use among formerly homeless individuals transitioning to permanent supportive housing. **The continued criminalization of substance use provides a significant barrier to accessing housing opportunities and primary and specialized health care services by PEH**: "Criminalization of substance use further stigmatizes people who use drugs, making it more difficult to engage people in health care and other services, a tendency that is often compounded by sociocultural factors associated with problematic drug-using populations, such as fear, lack of information and education, general physical and mental health problems, homelessness, and incarceration." Kleinman & Morris[17] note that the criminalization of personal substance use and possession "[does] not seem to effectively manage the health-related effects of substance use, yet contribute to mass arrest and incarceration, exacerbate racial and socio-economic disparities, [and perpetuates] stigmatization of substance use."[17] Housing First programs that rely on the framework of Harm Reduction, such as Managed Alcohol Programs (MAPs) discussed below in the section on interventions, are able to supportively assist clients with problems associated with SUD without resorting to stigmatization and criminalization. MAPs focus on reducing harms through provision of safer spaces and supply of alcohol, with opportunities for reconnection with family and friends and, where applicable, indigenous culture and traditions.[18]

Homelessness and problematic substance use are exacerbated by trauma and structural violence. For PEH in Hawai'i, this includes the historical trauma of annexation, minority stress, and the individual trauma of ACEs. Prior to annexation, Kanawai Mamalahoe, or The Law of the Splintered Paddle, explicitly protected the rights of people to "lie by the roadside without fear of harm" in the Kingdom of Hawaii.[19] In recent years Hawai'i laws have increasingly criminalized those who are visibly homeless. The criminalization of homelessness "creates a costly revolving door that circulates individuals experiencing homelessness from the street to the criminal justice system and back."[20,21] Those involved in the criminal legal system face significant obstacles to accessing evidence-based care for SUD, "placing them at risk for adverse health outcomes."[17] In addition to the criminalization of basic corporeal activities associated with unsheltered homelessness, criminal legal system involvement of PEH for personal substance use and possession is far reaching, with many facing months or years of correctional supervision though parole and probation systems.[17] Hawai'i leads the nation in its average term of probation at 59 months.[22] In contrast to structural violence limiting individual choice, harm reduction is a public health approach that aims to change this structure in ways that are holistic and person-centered to afford individuals living with trauma greater agency.

Current System of Care in Hawai'i

Hawai'i's current SoCs for homelessness and substance use encompass an evolving network of resources and referrals that intersect the behavioral health

system. **The Coordinated Entry System (CES) for shelter and housing and the Hawai‘i Coordinated Access Resource Entry System (CARES) for substance use represent the fundamental components of these systems.** CES facilitates the coordination of housing assistance within the housing SoC, quickly and effectively linking eligible individuals and families to resources and services that best meet their needs.[23] Partners in Care (on O‘ahu) and Bridging the Gap (for neighbor islands) represent Hawai‘i’s homeless services provider coalition.[24] CARES is a free, 24-hour referral program for substance use and mental health services. Prior to the launch of these programs, access to housing assistance or state-funded substance use treatment was fragmented into distinct entry processes for each program. CES and CARES provide a solution by offering a single-entry point for each SoC.

PEH who struggle with harmful substance use may access housing resources through formal residential or outpatient treatment. “Clean and sober” homes can be accessed through the Department of Health’s (DOH) Alcohol and Drug Abuse Division (ADAD) Clean and Sober Homes Registry.[25] Emergency and transitional shelters can be accessed directly. The Office of the Governor’s Coordinator on Homelessness produces a vacancy list for these sites that is updated daily with available bed spaces and eligibility criteria for access.[26] Sites include traditional homeless shelters and specialized housing, such as DOH’s Adult Mental Health Division-funded housing for people struggling with mental health challenges.[27] In addition to residential treatment facilities that provide housing and SUD treatment, ADAD funds nine therapeutic living programs (TLPs) statewide. TLPs are long-term supervised living arrangements that provide mental health and substance use services to individuals or families transitioning to independent living.[28] TLPs can be utilized across the SUD SoC to provide PEH with stable shelter as they access treatment and other services.

PEH who use substances report preferring harm reduction services that include shelter and identified that compassion and non-judgment of staff were components of effective treatment.[29] Given the myriad challenges in finding shelters for those struggling with SUD, state and local policymakers have increasingly focused on funding Housing First,[30] which prioritizes permanent supportive housing to PEH as a foundation to improve quality of life before addressing issues such as substance use. When implemented with wrap-around support services, 88% of Housing First tenants remained housed after five years.[31] In Hawai‘i, Housing First was first launched in 2014[32] through Hawai‘i’s Pathways Project, funded by Substance Abuse and Mental Health Services Administration (SAMHSA) through ADAD. This project, modeled after the original Pathways to Housing project which housed 99 individuals with substance use and mental health challenges with a 90% housing retention rate and an estimated healthcare cost savings of $6,197 per client per month. Subsequent Housing First programs were funded by the Hawai‘i Department of Human Services (DHS), Homeless Programs Office statewide.[30] The City and County of Honolulu also funds Housing First permanent supportive housing. A 2019 evaluation of the first increment of the program found that after 5 years

only 8% of participants fell back into homelessness.[33] Given the success of Housing First nationally and in Hawai‘i, it is the preferred method of working with PEH who also use substances and is required for those funded by the State of Hawai‘i Homeless Programs Office and the City and County of Honolulu.[34] Fidelity to the Housing First model, according to the United States Interagency Council on Homelessness (USICH), includes access to housing and programs without conditions such as abstinence, income requirements or mandated participation in services.[35]

PEH who are struggling with substance use and are not ready to access treatment can begin the process of accessing housing through CES. The first step is to conduct an assessment called the Vulnerability Index–Service Prioritization Decision Assistance Tool (VI-SPDAT) to get an acuity number which determines resources the person is eligible for. Once a person obtains a VI-SPDAT score and consents to enrollment in the Homeless Management Information System (HMIS) database, they are placed on the "By Name List" which CES utilizes to match people with available housing resources. During this time, people often work on becoming "document ready" for housing which includes having documents that landlords may require such as a valid picture ID or a social security card (and the birth certificate to get one of these documents). At any one time, there may be upwards of 3,000 people on the "By Name List" waiting for a housing resource, and typically only those with the highest score and those who meet the chronic homelessness definition utilized by Housing and Urban Development (HUD) will get access to limited housing resources. On average 50 people are housed per month via CES.[36] Paradoxically, participation in residential treatment may cause a PEH to lose their chronic homelessness status and therefore fall down the list for prioritization of housing resources due to the loss of chronic homelessness status. HUD defines chronic homelessness as "either (1) an unaccompanied homeless individual with a disabling condition who has been continuously homeless for a year or more, or (2) an unaccompanied individual with a disabling condition who has had at least four episodes of homelessness in the past three years."[37] HUD goes on to clarify that being sheltered for 90 days or more, such as in a correctional facility or a residential substance use treatment facility, which lead to the loss of the status of chronic homelessness and make it more difficult to match the participant with available permanent housing resources.

For PEH wanting to access substance use treatment services while unsheltered, the main access point is the CARES line. Access to CARES is via telephone, so PEH need their own phone to call in and be contacted once a program space is available unless a case manager or outreach worker is the point of contact and knows where to find them. ADAD has addressed this gap by funding outreach and transportation as part of its treatment contracts, and the forthcoming Community Integration Services (CIS) program through the State of Hawai‘i Med-QUEST Division will allow entities who have contracts with Hawai‘i Medicaid Health Plans to bill for certain pre-tenancy and tenancy support services including transportation and other services.[38,39] For PEH without a

phone or point-of-contact, it can be challenging to reconnect once an appropriate treatment resource has been identified and therefore having a case manager or other provider is recommended. For those PEH who are ready, willing and able to access treatment, have a phone or work with a case manager who can coordinate the referral and are able to be contacted by CARES will be assessed for the appropriate level of treatment utilizing American Society of Addiction Medicine (ASAM) criteria.[40] For those PEH whose ASAM level of care score is 3.1 or higher, residential treatment may be indicated, which leaves all PEH with a score below 3.1 with a lower level of care which will not include housing, unless a TLP or other housing program can be matched with outpatient treatment.[41] This gap in housing for PEH struggling with substance use may impact PEH's ability to focus on the treatment given the basic needs of shelter, food and transportation may compete with the desire to attend substance use treatment. TLPs, of which there are only twelve statewide, may also provide a place for PEH to transition to after residential treatment.[42]

PEH who are successful at navigating the SoC and complete residential substance use treatment have limited resources for housing after clinical discharge. Substance use treatment programs have resources to assist with housing placement through "clean and sober" homes, which are difficult for PEH to access as they typically require a security deposit and first month's rent.[25] Other barriers include lack of accommodations for those who relapse or use certain pharmacotherapies such as medications for opioid use disorder, which would not be contraindicated for housing placement under the Housing First model.

The struggle with the intersection of substance use and homelessness is not unique to Hawai'i. The USICH includes a representative from SAMHSA to ensure that these issues are addressed in policy recommendations, funding and develop a coordinated federal response to homelessness.[43] USICH recommends a Housing First approach[44] which is implemented through funding at both HUD[45] and SAMHSA.[46] But currently only HUD funding goes to Hawai'i for Housing First programs. State funding is available through DHS Homeless Programs Office for housing and related services.[47] The State DOH, Behavioral Health Administration allocates funds for services, including reimbursement for stabilization beds on a short-term basis.

Few homeless services include substance use services, and few SUD providers offer specific homeless services, although most services lay somewhere in between.[38] PEH who complete residential substance use treatment have limited resources for housing after clinical discharge. Substance use treatment programs have resources to assist with housing placement through clean and sober homes, which are difficult for PEH to access as they typically require a security deposit and first month's rent.[25] Emergency and transitional shelters are accessible individually, but few provide Certified Substance Abuse Counselors on-site. Centralization of shelter and specialty housing vacancies at CARES would facilitate better integration of the housing and substance use SoCs.

Interventions

The pervasiveness of homelessness in Hawai'i is a multilayered issue requiring an integrated, multidimensional approach at multiple levels of analysis and across various social systems. Hawai'i can look to Housing First and the innovative implementation of harm reduction principles in programs like Seattle's Law Enforcement Assisted Diversion (LEAD) and 1811 Eastlake for ways to integrate the homelessness and substance use SoCs. The continuing problem of SUD among PEH requires closer fidelity to the harm reduction principles underlying the ideal model of Housing First. Hawai'i can build upon its existing Housing First programs and make major strides towards resolving homelessness for this subpopulation by: (1) scaling up available Housing First vouchers to meet the needs of all those who qualify; (2) integrating the entry systems (CES and CARES); (3) utilizing innovative harm reduction-based approaches for those actively engaged in use; and (4) relying upon larger, interdisciplinary teams of support for clients, as demonstrated by the intensive case management of LEAD participants, which follows clients into housing and works with Housing First programs to ensure housing success.

Table 1. Treatment Modalities in Hawai'i from 2015 to 2017. Adapted from Kim & Zhang, 2018

	Outpatient	Residential	Therapeutic & Supportive Living	Intensive Outpatient	Social Detox	Methadone
# of admissions per year (rounded to 50)	2,500-2,850	500-550	150-200	950-1,000	450-500	1-50
% of admissions per year	55-56%	9-11%	3-4%	19-21%	8-10%	0.7-1%
% of federal and state funds	43-44%	30-33%	7-8%	9-11%	2-3%	3%
$ spent (millions, rounded)	$7-8	$5-6	$1	$1-2	$0.4-0.5	$0.5

Table 1 above describes the size of admissions and fund expenditures by type of treatment in Hawai'i. The numbers are aggregated based on the report by Kim and Zhang[48] from 2015 to 2017. Figure 1 below visualizes the percentages of the admissions and funds of the table by year. Outpatient programs were the highest expenditure of funding sources, costing $7-8 million dollars or 44% of all funds. By contrast, social detox programs and treatments using methadone are relatively underutilized, with no more than 500 patients admitted per year. This is a noticeable bottleneck in systems of treatment, as medication

management for SUD or detox is required prior to residential treatment admissions. Residential treatment programs do not currently have the funding or capacity to handle acute medical symptoms of chemical dependence. Continued reliance on an historically static model of abstinence-based residential programs provides substantial obstacles for treatment for PEH.

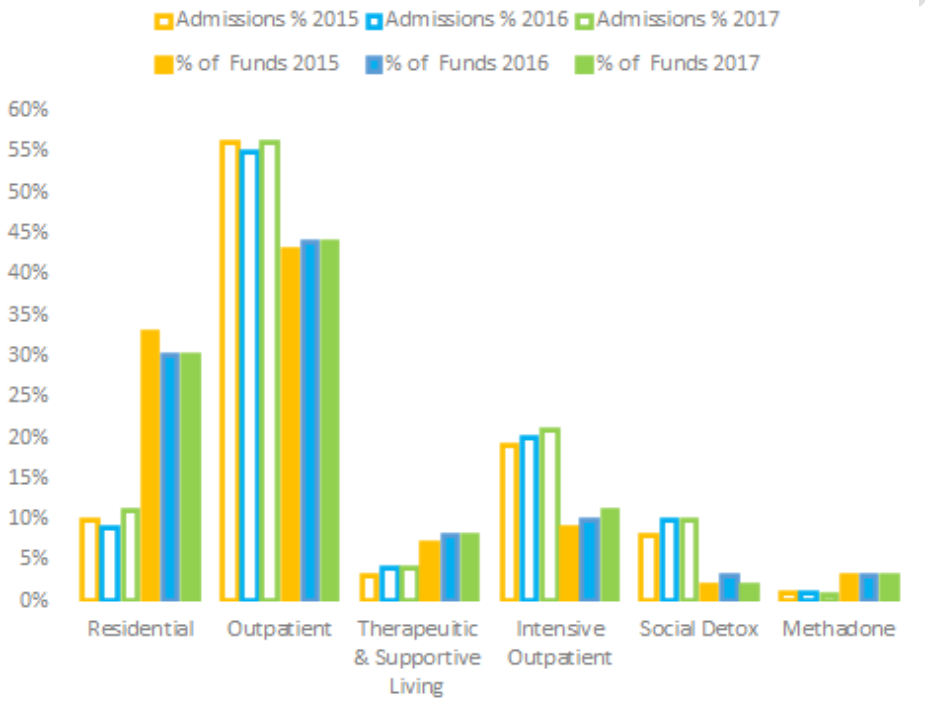

Figure 1. Percentages of Admissions and Funds Expenditure by Type of Treatment (2015 - 2017). Adapted from Kim & Zhang, 2018

Social detox programs are also relatively inexpensive with a total cost of $1 million per year. Residential treatment programs are only 9-11% of all admissions but with expenditures roughly on par with outpatient programs costing about $11,000 per patient per year, providing shelter for only 30-90 days at a time for PEH. In 2020 Hawai'i spent $3,000,000 on year-round shelter through Housing First programs for 351 individuals, costing about $8,500 per person.[30] The living environment is the 6th dimension identified by the American Society of Addition Medicine as a major factor that determines the success and path of treatment, PEH are automatically placed at the highest level of risk in this category.[49] Programs that provide navigation to social detox, outpatient services and linkage to PEH SoCs can accurately provide non-judgmental, non-punitive support to clients who relapse or are not yet motivated for abstinence.

A good example of non-punitive approaches to SUD treatment is LEAD. Founded in King County, Washington, as a response to disproportionate imprisonment of

minority populations for personal drug use, this model was recently implemented in Hawai‘i, where 98% of participants reported homelessness within the last 3 years. The 2018 Honolulu Pilot found that 78% of referred clients reported methamphetamine use, while 36% reported alcohol and opioid use prior to referral. By the second year of the pilot, those reporting methampheta-mine use saw a 23% reduction in their use. The Honolulu LEAD pilot worked to provide the necessary wrap-around SUD support and service navigation alongside Housing First and homeless service providers, seeing clients spend 47% less days sleeping on the street. A person using injection drugs who is not ready for SUD treatment can be connected to the syringe exchange program for safe use supplies or Hepatitis C testing and treatment. Those not wishing to stay in a temporary shelter can work with a LEAD case manager in the field to apply for permanent housing resources through CES. LEAD meets individuals at their level of readiness to engage for both housing and SUD treatment, scaffolding steady change that can be sustained over time.[50] Additionally, LEAD programs do not have to draw from existing, limited funding to address SUD among PEH. Albany County, NY, received $898,062 through the Bureau of Justice Assistance (BJA) to support the expansion of their LEAD program between 2018-2021.[51] The Comprehensive Opioid, Stimulant, and Substance Abuse Site-based Program grant through BJA is just one example of diverse funding available to support collaborative approaches to address intersections between PEH and SUD.

MAPs are integrated harm reduction interventions for individuals living with alcohol dependence, chronic poverty, and homelessness that focus on reducing harms through the provision of safer spaces and supply of alcohol. MAPs utilize a Housing First framework to provide accommodation, health, social support, along with alcohol storage and administration to moderate use and manage alcohol dependence.[18] Seattle’s 1811 Eastlake supportive housing program models a Housing First framework built for people living with alcohol use disorder. The facility includes a clinic and on-site SUD therapists to offer mediation to clients who have difficulty managing anger. Despite only setting out with the goal to provide housing services to underserved individuals, the program reported a 35% decrease in heavy drinking among participants during the first two years.[52] The 1811 Eastlake facility saved over $4 million in foregone costs associated with the provision of public support and health services for PEH in its first year.[52] As with other Housing First interventions, replicating MAPs in supportive housing environments like 1811 Eastlake in Hawai‘i would foreseeably result in reduced costs to the health care and criminal justice systems. This low-threshold approach will reach many of those persons experiencing chronic homelessness who have been rejected by abstinence-based service programs and likely result in improvements in life circumstances and drinking behaviors. The state’s SoCs will be able to more effectively respond to the ongoing behavioral health needs of those who have experienced chronic home-lessness and a lack of success in abstinence-based programs.[53] Maintaining fidelity to the Housing First model and harm reduction principles is a cost-effective way to see measurable reduction in harmful substance use.

Recommendations

With one-fifth of PEH also reporting harmful substance use, integration between the homeless and sub-stance use SoCs will be an important part of any serious effort to solve homelessness and support clients in maintaining stability once housed. Based on the findings above and feedback from stakeholders in the community, the following suggestions are provided to improve the coordination between PEH and SUD services statewide.

Increased coordination between the CES and CARES can ensure that clients are able to access the programs that will address their most pressing concerns. Integration of these Continua of Care will also lead to **better capturing data for homelessness within the substance use system and SUD within the housing system**. For clients who will require permanent housing support after leaving a residential program, we must **pay attention to contradictions within the two systems**; clients who have completed 90 days or longer in a residential program will lose their chronically homeless status and thus be ineligible for many Housing First programs. While this problem will need to be addressed on a larger systemic level, including an increase in TLPs across the state, individual programs can ensure client retention and success by **weaving harm reduction-based treatment into their permanent housing programs**. Building on the example of MAP at 1811 East Lake, Hawaii's Housing First programs can work with clients to maintain housing while reducing the harms of problematic substance use. These kinds of programs not only demonstrate treatment efficacy for the population of PEH experiencing SUD, but also show cost savings through preventative and stabilizing care, and further open spaces for diversified funding. Hawai'i has been consistently ranked among the highest per capita rates of homelessness. **Housing First, and the harm reduction approach to public health more broadly, offer the most promising paradigm from which to treat PEH who are also struggling with SUD**. By addressing substances use among PEH compassionately and with the non-punitive approach of harm reduction, housing and treatment programs in Hawai'i can ameliorate a persistent structural problem in our state and set an example for other jurisdictions in the United States.

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Implications for a System in Hawai‘i for Criminal Justice and Substance Use

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Abstract

Significant opportunities to improve treatment for substance use disorders can occur within the criminal justice system. This chapter will review the current system of care, understand current interventions available and to explore recommendations to better address community needs. With rising numbers of substance use and substance related deaths, this threat to the community is predicted to only worsen without intervention. There are multiple points in the justice system throughout the pretrial, court, and sentencing periods where the opportunity to help people with substance use disorder may occur. These points of diversion can focus on a more rehabilitative approach to crimes in the context of substance use disorder rather than punitive incarceration without adequate treatment. Police diversion can be increased and new police metrics incentivizing such efforts can be implemented in place of informal disposition by officers. Further training of law enforcement officers and continued development of support staff will help change practice allowing those with substance use disorders in the criminal justice system to connect to appropriate services. Data collection for research and analysis of recidivism among those engaged with diversion services compared to those who have not will help further guide future policy and resources for such programs.

Background & Introduction

The Prevalence and Threat of Drugs in Hawai‘i

Significant work in stopping drugs and related crimes by law enforcement and criminal justice agencies in Hawai‘i has led to a collection of data that has been studied by these same agencies. According to the Hawai‘i High Intensity Drug Trafficking Area (HIDTA) 2019 Drug Threat Assessment Report, methamphetamine and high-potency marijuana pose the greatest threats to the community.[1] For example, in 2015, there were 186 methamphetamine admissions per 100,000

people and 141 marijuana admissions per 100,000 people.[2] These drugs surpass treatment admissions when compared to other substances such as cocaine, heroin, diverted prescription medications, and any other drugs.[1] Highlighting the growing threat,[3] methamphetamine posed the greatest overall public health threat due to drug-related deaths, despite both marijuana and methamphetamine being the most widely available.[1]

The Purpose of the Criminal Justice System

The criminal justice system can be broadly described as the, "…structure of laws, rules, and agencies designed to hold criminals accountable for their misdeeds and help them to restore their victims as much as possible."[4]

The Components of the Criminal Justice System

Generally, the Hawai'i criminal justice system has four distinct components. **The first component of the criminal justice system is the police who are the "gatekeepers" for getting into the system.** The traditional role of the police in the US (and Hawai'i) are order maintenance, crime control, law enforcement, and service delivery. The community commonly perceives the core roles of the police to be service delivery and social service. The police are therefore referred to as social servants (people who work for community benefit), crime fighters, watchmen, and law enforcers.[5]

The second component of the Hawai'i criminal justice system is the courts. The role of the courts in the criminal justice system is to hold trials for those who are accused of crimes and to determine whether a suspect is guilty or innocent. In order to determine whether a suspect is guilty or innocent, the courts have three responsibilities. First, the courts ensure that a suspect's civil rights are protected during the judicial process. Second, the courts determine who may or may not be released prior to trial. Third, the courts determine whether there is enough evidence to proceed with a trial where they can determine fault and sentencing for those who are found guilty.

The third component of the Hawai'i criminal justice system is the corrections system. Traditionally, the correction system has had two roles. First, historically the corrections system was designed to separate offenders from the community by incarcerating and punishing them for committed crimes. Second, the corrections system was also designed to rehabilitate offenders by, "…preparing an individual to successfully reintegrate into the society."[6]

The fourth component of the criminal justice system is the juvenile justice system. The juvenile justice system is discussed in another chapter of the State Plan System of Care Implications volume. This chapter on criminal justice deals specifically with the adult criminal justice system.

The United States Substance Abuse and Mental Health Administration (SAMHSA) uses a model known as the, Sequential Intercept Model (SIM) as a way of describing how individuals with mental and substance use disorders come into contact with and move through the criminal justice system.[7] Based on the aforementioned criminal

justice components described earlier, SAMHSA describes six intercepts where those with mental and/or substance use disorders intercept with the justice system: community services, law enforcement, initial court hearings and initial detention, jails and courts, reentry and community corrections. In many ways, this plan corresponds with SAMHSA's SIM model.

How Does the Criminal Justice System Work?

The criminal justice system's use of discretion increasingly supports the community's idea of justice. An important element of the criminal justice system is the concept of "discretion", to be described later, which guides the "gatekeeping" of people brought into the system. Discretion occurs during the arrest role by the law enforcement agencies as seen in the diagram below. The decision is left with the officer with options to release without prosecution or to proceed with charges.

The criminal justice system begins with the reporting of a crime to the police. When a crime is reported to the police, the police perform their role by investigating crimes, identifying the offender, and possibly arrest those responsible. The following flow chart describes the start of the criminal justice system process by the police:

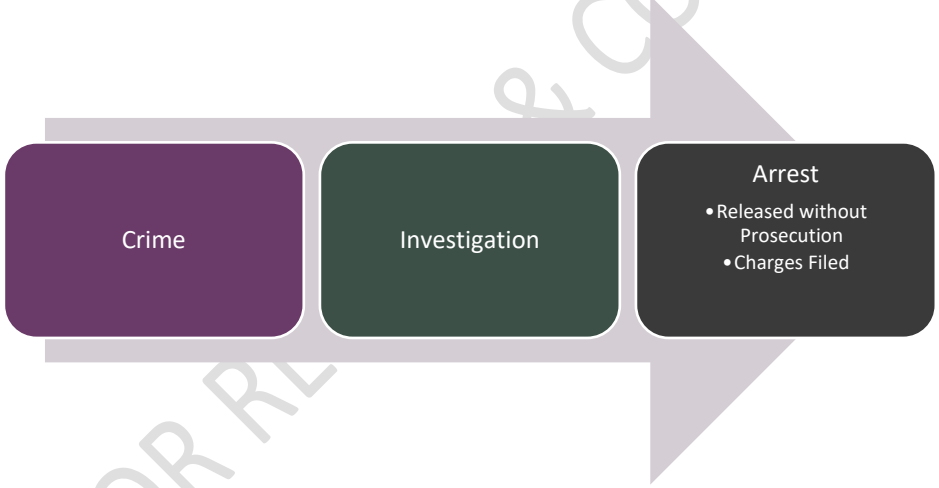

Figure 1. Diagram of the Police Component in the Criminal Justice System. Adapted from the Bureau of Justice Statistics8 flow chart titled, "What is the sequence of events in the criminal justice system?"

An important observation in the flow chart is the police role of "Arrest" which allows the police to release people without prosecution. This police role utilizes "discretion" which is discussed later in the chapter.

Second, if a person is arrested and charges are filed against an offender, then the criminal justice system, the court, assumes authority over the offender. There are two phases in the process for movement in the criminal justice system involving the courts, the pretrial phase and the adjudication phase. In the pretrial phase, there are a series of hearings designed to give defendants their due process. The basic pretrial process is diagrammed below in Figure 2:

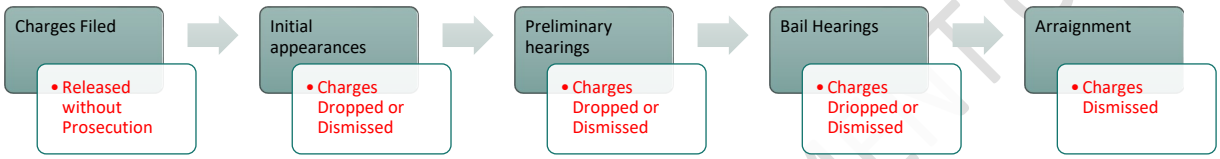

Figure 2. The pretrial process in the courts component of the criminal justice system. Adapted from the Bureau of Justice Statistics8 flowchart titled, "What is the sequence of events in the criminal justice system?"

As an offender moves through the pretrial phase of the criminal justice system offenders can have their charges dropped or dismissed at multiple points of the process. These numerous opportunities are again, in part, based on the discretion provided to the members (e.g., prosecutors and judges) in the court component of the criminal justice system.

When a case is not dismissed or settled through a plea bargain, defendants are brought to trial to determine their guilt or innocence. The diagram below (Figure 3) illustrates the process in the trial phase of the court system.

Figure 3. The Trial process in the Criminal Justice System. Adapted from the Bureau of Justice Statistics8 flow chart titled, "What is the sequence of events in the criminal justice system?"

Before the trial phase, a trial date is set at arraignment (the formal notification to a defendant of the charges faced). During arraignment, the defendant is given written notice of the charged crime and the defendant's plea is recorded. At the arraignment, both the prosecutor and/or the judge have the discretion to dismiss the offender's charges.

Moreover, at any point in the pretrial phase, the defendant can plead guilty and start the process to determine punishment. Should the defendant plead not guilty the defendant's case will be set for trial. Simultaneously, when a defendant's case is set for trail, there are customarily plea negotiations or "plea bargaining" in order to settle cases before trial. During that process, a defendant can have the charges reduced or even dismissed by the prosecutor. Ultimately, cases that are not settled will go to trial. Even at trial, charges or even the whole case can be dismissed. Considerations for dismissing the charges include: if the prosecutor cannot prove the case, if the judge finds that there is not enough evidence to support a charge, or if there is a violation of the offender's rights during court proceedings. Furthermore, when an offender goes to trial, there is always a significant chance that the offender will be acquitted. The case can be acquitted when the offender is found not guilty or where the prosecution has not proven the case beyond a reasonable doubt. All of these things mean that a defendant with a substance use disorder may be missed by the criminal justice system because they become expelled from the system if the charges are dismissed.

If an offender is adjudicated as guilty in the courts, then he or she enters the corrections component of the criminal justice system. The corrections component has two parts: 1) Probation – which is supervision of the defendant in the community without incarceration and 2) Incarceration – which is imprisonment in a correctional facility. The diagram below (Figure 4) describes the general process within the corrections component of the criminal justice system:

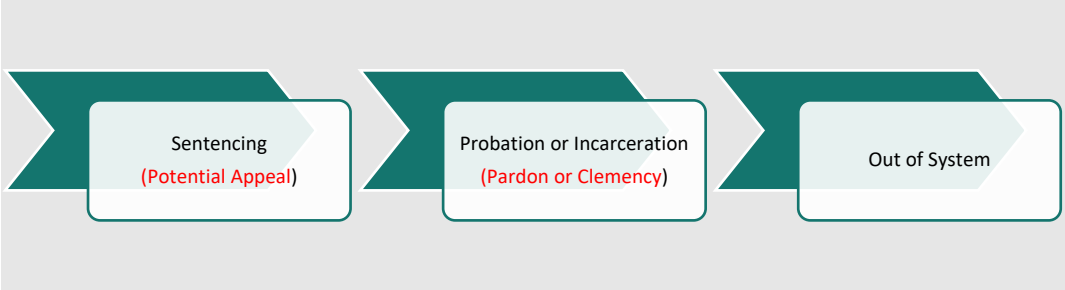

Figure 4. The Corrections Component in the Criminal Justice System. Adapted from the Bureau of Justice Statistics8 flow chart titled, "What is the sequence of events in the criminal justice system?"

Similar to the police and courts process for criminal justice, the correctional flowchart illustrates the ample opportunity for an offender to be diverted from entering or be out of the correctional system. Within the corrections component, offenders have the right to appeal which may lead to dropping of the convictions and accompanying sentences if won. Offenders may also be granted pardons (forgiveness of their crimes) or clemency (reductions in their sentences). Ultimately, an offender may also "max-out" or meet the conditions of their sentencing.

The Systems of Care and the Hawai‘i Criminal Justice System

The United States Department of Health and Human Services has defined a “system of care” as a “broad, flexible array of services and supports for a defined population(s) that is organized into a coordinated network, integrating service planning, coordination and management across multiple levels. This coordinated network is culturally and linguistically competent, builds meaningful partnerships with families and youth at service delivery, management, and policy levels, and has supportive management and policy infrastructure.”[9] The aim of this writing is to review the current system of care, understand current interventions available and to explore recommendations to better address community needs around the intersection of substance use and the criminal justice system.

Traditional Systems of Care for the Police Component of the Criminal Justice System

In Hawai‘i, a common access point for care of individuals with substance use disorders is arrest, which leads to a person’s entry into the criminal justice system. After arrest, a person with a substance use disorder can be supervised by the courts and later by corrections officials to get substance use treatment. However, **there are two scenarios within Hawai‘i law for officers to engage individuals who are not criminally arrested. The first is when an officer determines an appropriate response to individuals who are imminently dangerous to themselves or others**. In such cases, a common action is for police to take such people into custody if probable cause is determined.[10] Those people then have the opportunity to be offered mental health treatment and services outside the criminal justice environment.

At the state-level, state and local law enforcement officers are directed to conduct rudimentary assessments of substance use in certain police encounters. The first situation typically seen by law enforcement is when an officer must determine an appropriate response to people who may be imminently dangerous to themselves or others. In such circumstances, if the person is, “…imminently dangerous to self or others based on the totality of circumstances and observations of behaviors believed to be associated with mental illness or substance use disorder “law enforcement will take such people into custody if probable cause of being imminently dangerous to self or others is determined.[10] In practice, the assessment of substance use in this situation is relegated to determining whether substance use is contributing to behavior that makes a person dangerous to self or others rather than determining exactly what is going on with a person who may be struggling with a substance use disorder. The assessment here is not for determining underlying causes of substance use.

The second situation is drug-use recognition assessments made by drug recognition experts to determine whether or not to make an arrest in a driving under the influence (DUI) case. In this situation, a specially trained police officer investigates for physical clues (e.g., increased heart and respiration rates) and cognitive clues (e.g., inability to count

numbers or recite the alphabet) as ways to determine a person is under the influence of controlled substances.

Law Enforcement Assisted Diversion

The second scenario is diversion or alternatives to arrest, which fall into two categories. The first involves the pre-arrest stage where the officer utilizes discretion to not arrest. In pre-arrest diversion, specialized training of officers and/or having ancillary support staff to address mental health and substance use disorders are essential. Diversion and mental health training for officers may lead to a decrease in informal dispositions. Such dispositions conveniently decrease paperwork and officer downtime as there is no engagement with mental health resources or process for arrest.[11] Diversion can also involve specialized teams to improve pre-booking assessments. Examples include teams where officers receive specialized training in mental health and substance use disorders. In this model, officers can make referrals to services or transports to emergency care with a "no refusal" policy, which is seen commonly throughout the United States. This model may also involve a mobile crisis team where behavioral health experts help police decide a course of action.[12]

The second category is the Law Enforcement Assisted Diversion (LEAD) initiative which also allows diversion from prosecution.[13,14] LEAD is focused on individuals where criminal activity is due to behavioral health issues. Typically, the suspect has committed minor offenses where police may offer a referral to a LEAD worker who can coordinate services, housing, medical care, substance use services and mental health care. In Hawai'i, this category has yet to be practiced in a meaningful way. Figure 5 below shows a simple flow of when the police determines that a person is imminently dangerous to self or others and make a non-criminal arrest diverting the person to a healthcare provider.

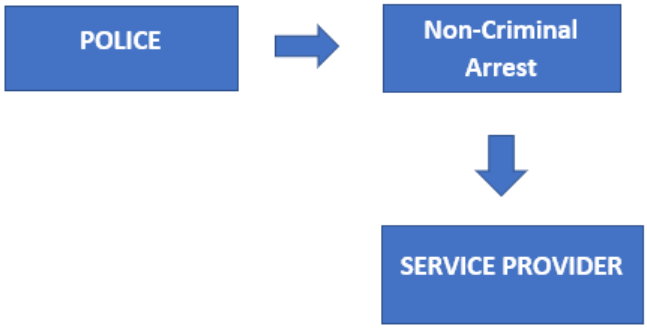

Figure 5. Non-criminal arrest and diversion to a healthcare provider.

The Hawai'i LEAD program has had some early success based on "social contacts" between police, LEAD team members, and clients, but can be more meaningful if true diversion, that is, diversion from entry into the criminal justice system by not arresting people for low-level offenses, is practiced. To do this, prosecuting attorneys and police managers must agree on what low-level offenders may be diverted away from criminal arrests and towards services provided by LEAD.

Police Performance Evaluation

Police performance is evaluated in multiple ways which impact the system of care for substance use disorder. Traditional police performance metrics have, historically come in the form of easy to track metrics, such as the number of arrests made, calls the officer responded to, and reports that were taken. Enforcement activities given close attention

for metrics include arrests, warnings, and the like. For law enforcement agencies, crime rates tend to be the go-to metric in determining effectiveness, despite the fact that issues well outside of a police agency's control can have a tremendous impact on crime in a given community.[15] For example, a community's economic health can affect crime rates, yet law enforcement can do little to improve on the issue. Law enforcement agencies, especially in Hawai'i, are tracked by metrics that are easily ascertained like those mentioned above. For example, in a review of the Honolulu Police Department's 2019 Annual Report, the Department published in its statistics section of their report, the number of adults and juveniles arrested based on traditional "Part I" and "Part II" crimes under the FBI's Uniform Crime Reporting (UCR) program. The FBI's UCR program has been administered by the FBI since 1930.[16] Under the UCR Program, law enforcement agencies report crime statistics categorized as Part I, seven serious offenses such as murder and forcible rape, and Part II offenses, less serious offenses such as arson, forgery, and fraud. Drug offenses are listed in the Part II offense report under the category "Drug Laws." Furthermore, the State of Hawai'i, Narcotics Enforcement Division reports its crime statistics annually using the following performance measures:

Table 1. List of the Narcotics Enforcement Division Performance Measures (Source: Franco (2010)[17])

1. Total number of cases that resulted in successful prosecution
2. Total number of cases conferred and accepted by prosecuting agencies
3. Total number of cases referred and declined by prosecuting agencies
4. Total number of cases referred to Federal agencies
5. Number of criminal cases investigated from the Honolulu International Airport, correctional facilities, and other locations
6. Number of regulatory actions taken
7. Number of drug education and training sessions conducted
8. Total number of cases that resulted in successful prosecution
9. Total number of cases conferred and accepted by prosecuting agencies
10. Total number of cases referred and declined by prosecuting agencies
11. Total number of cases referred to Federal agencies
12. Number of criminal cases investigated from the Honolulu International Airport, correctional facilities, and other locations

A review of both the HPD Annual Report and the State's Variance Report both use the numbers of arrests and the numbers of cases as the basis for performance for police. High police performance is measured by ostensibly high numbers of arrests or, in the case of the State, successful prosecution or referrals for prosecution.

At the federal level in Hawai'i, law enforcement performance is based on "drug threat" in similar approaches to state and local police metrics such as numbers of arrests and cases. A review of the 2019 Hawai'i HIDTA Annual Threat Assessment Report shows that federal law enforcement performance metrics are based largely on the amounts of drugs seized and the numbers of drug trafficking organizations identified, disrupted, or dismantled. The

report contains a single graph of "Methamphetamine Related Percent of Overdose in Hawai'i" as a way of emphasizing the threat of methamphetamine in Hawai'i.[1]

System of Care and the Courts

In Hawai'i, there are generally **three situations where the courts are involved in care for substance use disorders: bail, drug treatment courts, and probation**.

Bail Investigations

The first situation, bail, is where the system of care in the courts begin. This occurs after a person is arrested and charged with a crime and is taken for their initial appearance before a court. When a person is arrested by the police, the arrested person is generally entitled to bail which is money to be withheld from the defendant to secure their future attendance in court. The Constitutions of both United States and the State of Hawai'i protect a defendant's fundamental rights. In Hawai'i, a defendant, with little exception, is nearly guaranteed the right to bail, and that right triggers an assessment by the courts to determine a defendant's fitness for bail in comparison to their potential risk to the community.

The Department of Public Safety performs bail investigations and makes bail recommendations for defendants who do not post bail at the police station. However, the Department of Public Safety normally makes bail recommendations for those defendants involved in family crimes or serious misdemeanor or felony offenses. Consequently, not every defendant at the state level has the opportunity for a pretrial bail assessment. However, when a pretrial bail assessment is done, the Department of Public Safety uses the Ohio Risk Assessment Survey (ORAS) as a tool to determine risk and pretrial success. Among other things, the ORAS asks two questions: one about recent drug use and another about of one's perception of their use. Consequently, those defendants who are not assessed represent a missed opportunity in the current system to identify those who may have a substance use issue and to offer them treatment or services.

Use of Drug Treatment Courts

The second situation in the Hawai'i courts system of care is the use of drug treatment courts. In the article, "Drug Courts: Background, Effectiveness, and Policy Issues for Congress", Franco[18] writes that "[o]verall, GAO (Government Accounting Office)'s assessment found that drug court programs led to statistically significant recidivism reductions (ie, reductions in rearrests and convictions)".

Use of Specialized Probation

The third situation is when the courts sentence a person to probation. Probation is a sentence served in the community while under court supervision. In Hawai'i, all probationers must comply with conditions that include: a restriction not to use illegal drugs, a requirement to submit to drug testing, and if directed, a requirement to participate satisfactorily in substance use treatment. Accordingly, the courts work with community organizations to treat offenders who are directed into treatment.

Hawai'i's Opportunity Probation with Enforcement (HOPE) Probation is one such community organization that helps improve ongoing treatment interventions within the criminal justice system. HOPE Probation is, "a strategy to effect positive behavioral change

for those under court supervision. The premise is that clearly stated, easily understood rules are more readily followed by offenders when any rule violation quickly results in a brief stint in jail."[19] Under the Hawai'i HOPE probation model, the courts can provide a more tailored intervention. The HOPE program is not a diversion program but is a court intervention which seeks to target resources to higher-risk individuals more likely to commit new crimes. Such high-risk offenders can be those with more serious criminal histories, severe substance use, failure with regular probation, sex offenders and those with felonies. The program effectiveness may be attributed in part to closer supervision, more timely action seen by expedited warrant for arrest with a court hearing to take place within two business days. The consequences for violations also follow a model of being consistent and proportionate to the magnitude of violation. Research has shown improved outcomes among those in the HOPE program compared to standard probation. In a randomized controlled trial, improved outcomes were seen as reductions in positive drug tests, probation revocations, missed appointments, days incarcerated and recidivism.[20]

The Hawai'i Corrections Intersection with the System of Care

The Hawai'i Corrections System has an established treatment program consisting of several parts. The first is **screening**. The Department of Public Safety uses instruments for incoming inmates that assist in classifying risk and predicting recidivism. The Hawai'i Interagency Council on Intermediate Sanctions reported that these tools include the Level of Service Inventory-Revised (LSI-R) instrument which contains a subdomain for substance use and the Adult Substance Use Survey (ASUS).[21] The LSI-R and ASUS were used to measure "criminogenic and alcohol/drug dependency risk levels, as well as the severity of criminogenic and alcohol/drug patterns, known as subdomains. This report further notes that "all offenders are classified by risk levels, which provide invaluable information needed for case supervision purposes and determining treatment levels."[21] There were significant associations with increased LSI-R score and offender recidivism, and with subdomains including criminal history, education/employment, companions, alcohol/drugs, and accommodations.[21] The ASUS social subdomain was also found to be associated with offender recidivism.[21] It is important to note that these instruments help risk classify offenders to allow for appropriate treatment determination which are evidenced-based for substance use disorders.

Another risk assessment tool which may help determine supervision level is the ORAS. The ORAS was designed and validated to allow more accurate risk assessment for offender recidivism at different points in the criminal justice system. It includes five different risk assessment tools for the different stages of the criminal justice system. These include the Ohio Risk Assessment System for: Pretrial Assessment Tool, Community Supervision Tool, Community Supervision Screening Tool, Prison Intake Tool, and Reentry Tool. These tools are also used to determine supervision level and to assist case managers to determine possibly modifiable risk factors and treatment barriers. These modifiable or dynamic risk factors can include substance misuse, association with antisocial peers, mental health needs, low income, and problems with employment.[22]

The next stage following assessment is **treatment**. The corrections system uses a variety of treatment types including: "no" treatment, increased urinalysis testing with drug/alcohol education, weekly outpatient therapy, intensive outpatient therapy, residential treatment, and therapeutic community treatment. The Hawai'i corrections

system also has a medication-assisted treatment (MAT) program that uses regularly prescribed medications such as buprenorphine to treat opioid use disorders.

Observations and Interventions

The Intersection of the Criminal Justice System with Discretion and Legal "Hard Stops" in the Criminal Justice System

An equally important feature in the criminal justice system is the concept of **criminal justice discretion**. Criminal justice discretion is traditionally defined as "an authority conferred by law to act in certain conditions or situations in accordance with an official's or an official agency's own considered judgment and conscience."[23] In the criminal justice system, the following criminal justice officials have wide discretion, especially in the following areas shown in Table 2.

Table 2. Discretion in Criminal Justice. Adapted from the Bureau of Justice Statistics[8] flow chart titled, "Who exercises discretion?"

Criminal Justice Official	Decide whether or not or how to
Police	Enforce specific laws Investigate specific crimes Search people, vicinities, buildings Arrest or detain people
Prosecutors	File charges or petitions for adjudication Seek indictments Drop cases Reduce charges
Judges	Set bail or conditions for release Accept pleas Determine delinquency Dismiss charges Impose sentence Revoke probation
Corrections Officials	Assign to type of correctional facility Award privileges Punish for disciplinary infractions
Paroling Authorities	Determine date and conditions of parole Revoke parole

Discretion provides criminal justice officials with authority conferred by law to act with a broad range of choices including choices to not enforce laws, to arrest or not to arrest

people, to drop cases, to grant or not grant bail, to dismiss charges in court, and to award and punish defendants.

Discretion also impacts the way the system deals with those with substance use disorders. Entry into the criminal justice system requires the police to make an arrest. Thus, if police exercise their discretion when investigating a crime and chose not to arrest, a person suffering from a substance use disorder will not receive services and treatment within the criminal justice system. Moreover, even if the police were to arrest that person, prosecutors, judges, and other criminal justice system officials may choose to exercise their lawful discretion and exclude the person from services and treatment within the criminal justice system. Consequently, the criminal justice system is a filtering process that may either fail to identify people who have a substance use disorder or exclude people who might otherwise use criminal justice system services and treatment.

Management of criminal justice discretion process is important in order to harness opportunity to connect people with treatment. Discretion in the system leads to filtering people out of the system and away from the protective services and treatment that the criminal justice system can offer. That filtering process may take place upon contact with, and within the various parts of the criminal justice system. As a result, it is important that the police and the courts be well-connected to non-criminal justice treatment providers who can take referrals for those people who never enter or are filtered out of, or away from the system. To support those connections to treatment providers, the police and the courts must know what treatment resources exist and be trained in a practical procedure that can quickly connect people at the point of police, or court contact, with those resources. For example, a police officer who uses his or her discretion, and decides not to arrest a person, but who learns that that person could benefit from treatment, must quickly be able to refer that person to resources. To do this, the officer must have quick access to available service providers and contact information to reach them quickly.

Legal "Hard-Stops" that Create a Barrier to Services and Treatment

In addition to criminal justice discretion, there are legal "hard-stops" that can create barriers to engaging with services and treatment.

First, criminal justice operates under other important legal concepts. Two of these important concepts are "certainty" and "standard of proof." Certainty is an issue in criminal justice because it attempts to gauge a person's guilt relative to the crime, they are suspected of committing. Standard of proof is important because the Constitution requires, "guilt beyond a reasonable doubt" in order to convict someone. In criminal justice, there are differing levels of certainty and standards of proof. Generally, in order for a person to enter the criminal justice system, there must be a high standard of certainty. The Hawai'i Revised Statutes (Section 803-5)[24] dictates the standard of proof to arrest someone is "probable cause." Probable cause is on the high end of the scale of certainty in criminal justice. Moreover, if probable cause that a person committed a crime does not exist when the police contact a person, then legally there is traditionally little the system can do to begin services or treatment.

Second, people in the criminal justice system who have not been convicted are presumed innocent and therefore generally entitled to receive bail upon arrest. Consequently, a defendant who has been given the opportunity for bail in the pretrial phase, but is first detained, can post bail and be released anywhere along the pretrial timeline. In Hawai'i, the trial can be many months or years after an arrest. The 2021 forecast data from the Hawai'i Department of Public Safety showed median overall court processing time (i.e., the amount of time to settle one's affairs with the court) was about 200 days or more in 2020 and the felony court processing time was 400 days or more in 2020[25]. It is important to note there is limited to no substance use treatment in pretrial jail. Those who bail out of pretrial detention may also have inadequate or limited pretrial supervision for substance use, although this varies between offenders. This coupled with the low-level supervision of pretrial defendants in the Hawai'i state system of care means that defendants who start pretrial substance use services or treatment may be at risk of failure because they bailed out of pretrial detention at a critical point in their treatment. Second, people who have been convicted and sent to prison and who also have a substance use disorder cannot be forced into correctional drug treatment programs. Consequently, for those who "max-out" or complete their prison sentences without even starting a program and/or those who do not complete substance use treatment, both cannot be touched by the system when their sentence is completed. According to the 2019 Hawai'i Recidivism Report by the Hawai'i Interagency Council on Intermediate Sanctions, the recidivism rate for maximum term release prisoners was 57%.

Consequently, two important ideas should be mandated. First, that policies and processes be implemented to reduce the number of offenders who flatly "max-out" with no treatment. Research by Florida State University into the benefits of supervised or conditional release versus release without any conditions has shown that that those offenders who undergo conditional or supervised release are less likely to reoffend.[26] Accordingly, instead of allowing offenders to simply "max-out", offenders should be required to participate in conditional release or community supervision programs where treatment can be mandated and/or continued. Second, offenders should be incentivized to enter and complete drug treatment while incarcerated. Currently, earned, or good time earned towards early release does not occur in Hawai'i. Attractive incentives such as earned time credits, moves to lower levels of security supervision and/or increased privileges should be and/or continue to be a "carrot" for participation and completion of treatment. These two ideas taken together will help to ensure that greater numbers of offenders start treatment and continue their treatment upon release, thereby offering greater opportunity to be successful after release, and likely decreasing the overall recidivism rate.

LEAD

Presently, the county police departments and the Sheriff Division are involved in the LEAD program.[27] LEAD's goal is to reduce client recidivism for minor offenses. LEAD diverts offenders on the front end of the criminal justice system by diverting individuals away from the criminal justice system to a more rehabilitative approach. There are short-term goals over the initial six months to coordinate resources to improve housing stability, increase social support, reduce substance use, and for stress mitigation. The long-term goals include improved quality of life and reductions in emergency room use, inpatient hospital stays

and arrests.[28] Table 3 below shows the results of the LEAD program in Honolulu after one year:

Table 3. Law Enforcement Assisted Diversion (LEAD) Honolulu 1-Year Program Data Results. Adapted from Gralapp et al. (2019).[28]

SHORT TERM MEASURES	
Housing	↓ **38%** days sleeping on street/park/beach ↑ **138%** days staying in emergency shelter ↑ **90%** days living in transition housing ↑ **303%** days living in shared apartment ↑ **442%** days living in independent apartment
Substance Use	↓ **100%** days used cocaine ↓ **100%** days used K2 or synthetic marijuana ↑ **6%** days used opioids/heroine ↑ **12%** days used marijuana/hashish ↑ **51%** days used alcohol
Stress	↓ **5%** days felt unable to control the important things in life ↓ **3%** days felt difficulties could not be overcome ↑ **15%** day felt that things were going their way ↑ **15%** days felt confident about ability to handle personal problems ↑ **62%** days felt hopeful about future
Long Term Measures	
Emergency & Hospital use	↓ **40%** percentage gone to the emergency room in the past month ↑ **33%** percentage admitted to hospital in the past month
Crime & Recidivism	↓ **55%** frequency of cited encounters *(change in 3.05 to 1.36 cited encounter frequency per client per year)*
Community Support	↓ **1%** times visited a spiritual group in last month ↑ **78%** times attended a community group in the last month ↑ **48%** times engaged in recreational activities in the last month ↓ **78%** times participated in a support group in the last month
Social Support	↑ **35%** someone able to help if confined to bed ↑ **24%** someone to take to doctor if needed ↑ **19%** someone to share private worries and fears with ↑ **17%** someone to turn to for suggestions about how to deal with personal problems ↑ **13%** Someone to do something enjoyable with ↑ **7%** someone to love and make you feel wanted
Health & Wellbeing	↑ **5%** general health improvement ↑ **17%** # physically unhealthy days past month ↓ **17%** # mentally unhealthy days past month ↓ **7%** # activity limitation days past month ↓ **1%** # days in pain past month ↓ **13%** # days depressed past month ↓ **18%** # days anxious past month ↓ **19%** # days not enough sleep past month ↑ **38%** # days full of energy past month
Experiences with Trauma	↓ **30%** experienced violence, trauma, or sexual maltreatment/assault in past month ↓ **6%** witnessing physical or emotional trauma

The LEAD evaluation report released in 2020[27] showed significant improvement in the community for many of the aforementioned goals. Between July 1, 2018, and July 31, 2020, 101 individuals who were referred to LEAD through different outlets and were provided services or triaged out to services. The comparison group is the previous year. For the short-term goals, the evaluation found a 47% reduction of individuals in the LEAD program

sleeping on the street, park, or bench. Individuals engaged in LEAD increased in housing from 13% to 48% on their last assessment from the previous month. There was a 50% decrease in the average number of days spent in an emergency shelter with concurrent 46% increase in average number of days in transitional housing. Furthermore, there was a significant increase in days living in shared apartment or in an independent apartment. There were significant improvements in substance use seen by a 23% decrease in methamphetamine use by clients since the start of the program. Last assessment data adjusted for prior to COVID-19 revealed a 50% decrease for the average number of days (5.82) for opioid/heroin use 30 days prior as compared to average number of days at first assessment (11.67). The only category with an absolute increase was for the number of days of alcohol use from 6.3 to 7.0 days over the past month. Finally, with community resource engagement, the number of days clients felt hopeful increased by 83%.[27]

The long-term goals measured showed significant improvements in multiple domains as well.[27] Hospital admission decreased from 10% for clients down to approximately 6% before the COVID-19 orders. Emergency room visits likewise decreased from 32% to 11%. The hospital admission and emergency room visit showed a 56% and 30% decrease respectively. The number of citations and encounters increased significantly. There were 304% more citations per month with referred LEAD clients compared to the 82% increase seen with clients triaged to other services and not enrolled in LEAD. However, there was only an increase of 7% more encounters with law enforcement resulting in a citation issued for LEAD clients compared to the 93% increase for triaged only clients. The report noted that triaged clients had bigger percentage increases in police encounters compared to LEAD referred clients. It is important to note that the most common citations were for entering closed parks, sitting/lying on sidewalk, and jaywalking.

Drug Treatment Courts

The second intervention in Hawai‘i involves drug treatment courts. The Hawai‘i Judiciary reported in 2019 that more than 2,100 people have graduated from Drug Court programs in the state since 1996.[29] The Government Accounting Office assessed the effectiveness of drug court programs leading to statistically significant recidivism reductions (i.e., reductions in rearrests and convictions).[18] Because these programs provide offenders with court supervision, mandatory drug testing, substance use treatment, and other social services, drug courts are considered to be an important strategy for reducing incarceration and providing access to treatment and reducing drug use and recidivism. The National Institute of Justice’s multi-site adult drug court evaluation showed that drug court participants were less likely to have a drug relapse, report criminal activity, or need employment, educational, or financial services at 18 months.[30]

Recommendations

The traditional criminal justice system was designed to hold criminals accountable. However, in order to improve the system of care for substance use in the future, processes within the criminal justice system must evolve. To improve the criminal justice system of care in Hawai‘i, the following recommendations across the components of the criminal justice system (police, courts, and corrections) should be considered.

Priority should be placed on alternatives to arrest and incarceration.

When the LEAD program was introduced in Hawai'i, a pilot project was completed to gauge the effectiveness of the program. The results of the project showed a 23% decrease in methamphetamine use by clients since the start of the program.[27] This measurable decrease in methamphetamine use shows the promise of LEAD's impact in reducing drug use. When LEAD's efficacy was studied in Seattle, where LEAD has been practiced for a longer time, the study showed that the effects of LEAD in reducing arrests revealed lower odds of recidivism resulting in arrest.[14] This is promising because offenders tend to achieve better outcomes when substance use treatment is community based rather than occurring in incarceration. Consequently, alternatives to arrest and incarceration coupled with community-based treatment should be prioritized in the future.

Harness opportunities to offer services and treatment.

The police traditionally do not screen for substance use disorders and in the pretrial phase there are currently limited assessments for substance use. The police and others should utilize the opportunity when people are in custody to assess and coordinate referrals for services. Brief assessment tools, such as the Ohio Risk Assessment System Pretrial Assessment Tool,[31,32] may be a simple starting place in identifying opportunities to begin the process of helping people.

Ensure that there is continuity of care while justice-involved people move through the criminal justice system.

The Hawai'i criminal justice system must ensure uninterrupted continuity of care. Those who have initiated treatment and/or services prior to their arrest and introduction into the criminal justice system must be assured that their treatment can continue while they are involved with the justice system. Similarly, those who are released from the criminal justice system because their charges are dropped, or they are found not guilty must also be assured that any treatment that was started can continue even after their justice system involvement is over. Moreover, the role of continuity of care and its effects on recidivism should be studied to determine if continuity of care started before during, and after involvement with the justice system lowers the rate of recidivism.

Ensure or create incentive programs that motivate incarcerated people to participate in treatment programs while incarcerated.

A significant situation within the corrections population are those offenders who decide not to participate in any treatment programs and "max-out" of the system. The 2019 recidivism rate amongst the maximum sentence offender group was 57%. To reduce the recidivism rate in this group, treatment programs can be incentivized to increase participation and complete the requirements of such programs.

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Implications for a System of Care in Hawai‘i for Youth Involved in the Justice System and Substance Use

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“There can be no keener revelation of a society’s soul than the way it treats its children.”

– Nelson Mandela

Abstract

The shift from punitive responses to restorative public health approaches to tackle the problem of youth substance use and justice system involvement follow a nationwide trend. Hawai‘i has made significant strides towards transforming the justice system and developing effective substance abuse programs. However, these efforts require changes in policies, practices, and paradigms to be fully and permanently realized. Such a philosophical shift requires a major reallocation of resources from downstream, high-cost punitive modalities, such as incarceration, to upstream solutions that allow them to heal past trauma and grow the understanding and tools to lead a healthy and meaningful life. Research and evaluation to support ongoing learning and system improvement will also be required. Most critically, taking an approach to work with youth so they can overcome the root problems they face holds the most promise of ending the cycle of justice involvement and substance use that the state has witnessed for far too long.

Background & Introduction

In this chapter, we advocate that Hawai'i is uniquely situated to reveal the guiding values of this place and its people with Aloha being embodied in a holistic and restorative system of care that supports some of our most vulnerable children who are entangled in both the justice system and substance use. The intersection between adolescent substance use and the youth justice system has been a persistent public health issue,[1,2] Yet for decades, the dominant U.S. policy framework has consistently advanced a punitive response to substance use, rather than a response informed by public health principles. In spite of a prolonged lack of evidence that carceral measures are effective in reducing substance use or other behavioral health concerns, the punitive approach has engendered both political durability and public legitimacy as a "tough-on-crime" strategy. [3-6]

Yet in Hawai'i, years of mobilization, advocacy, and investment to transform the youth justice system present an opportunity to reject the flawed logic that youth substance use is a threat to community safety and stability best addressed through law enforcement measures. Partners and leaders in the Hawai'i system of care have the political will to solve root causes of substance use tied to enduring legacies of colonization and criminalization that maintain the vulnerability of primarily Native Hawaiian and other Pacific Islanders to justice system involvement. Through a transformed system of care, coordination of services for youth can be improved and community-based and culturally grounded healing interventions can be implemented, evaluated, and adapted in partnership with the youth and families with lived experience with substance use.

Significance of the problem

Although the association between substance use and justice system involvement has been found to be direct as in the case of appropriately 9%-10% of youth arrested and detained for drug charges as compared to other offenses,[1] the link has been much more intertwined. According to the National Center on Addiction and Substance Abuse[7] (1) 78% of the 2.4 million juvenile arrests in 2000 involved youth indicated to be under the influence of alcohol or drugs, tested positive for drugs, were arrested for committing an alcohol or drug offense, or reported having substance abuse problems; (2) of the 54% of juvenile arrestees testing positive for drugs at the time of their arrest, 92% tested positive for marijuana; (3) the number of drug-law-violation cases referred to juvenile courts increased at more than 12.5 times the rate of the total number of cases referred to juvenile courts from 1991 to 2000; and (4) the more often youth were arrested, the more likely they were to drink alcohol and use drugs.

In addition, adolescents who used substances and were involved with the justice system were at greater risk for polysubstance use, [8] sexually transmitted infections, [9,10] suicidality, [11, 12] and recidivism. [12] Further, formerly detained youth were found to be disproportionately at risk to meet criteria for a substance use disorder in adulthood.[13]

Unfortunately, despite the robust co-occurrence of adolescent substance use and justice involvement, there has been limited service utilization, and thus, under-treatment, before, during, and after confinement. [12,14] For example, nationally only 21% of the youth received substance use services before and after detention or incarceration.[14] In addition, for moderate substance use, ethnic differences were found whereby non-Hispanic European Americans were more likely to receive substance use services as compared to Hispanic and African American youth.[15]

Ethnoracial disparities in the U.S. and Hawai'i justice systems must be acknowledged in this discussion on improving substance use supports for system-involved youth. Beginning with the adoption of a western legal system during the 1800s in Hawai'i, Native Hawaiians and less assimilated migrant populations have been disproportionately impacted by "energetic police and judicial activity" [16]. The long arc of colonization has undermined traditional cultural practices and exacerbated inequalities and pains of injustice experienced in pronounced ways within these diverse Pacific populations (eg, substance use, homelessness, suicide, unemployment, lack of health care, incarceration). [5] In the post-plantation era, over-representation in the justice system has continued to impact Native Hawaiians and migrating populations often characterized by economic vulnerability and social pressures to assimilate. Samoan youth were subject to greater scrutiny and a trend of justice system involvement in the 1990s-early 2000s. [17] Currently, as families migrate to Hawai'i under the Compact of Free Association (COFA) from the Republic of the Marshall Islands and the Federated States of Micronesia, COFA nations' youth are increasingly becoming involved with the youth justice system and substance use. [18] This sociohistorical context is essential to understanding the interconnection of substance use with youth justice, with the goal of strengthening Hawai'i's system of care for youth.

Prevalence

Substance use has been consistently found to begin and substantially increase during the early adolescent and adolescent years. According to the national Monitoring the Future survey, in 2020, the overall lifetime prevalences for 8th, 10th, and 12th graders combined were 34.7% for any illicit drugs, 30.2% for marijuana, 44.0% for alcohol, 16.2% for cigarettes, and 37.2% for e-vaporizers.[19] Further, such prevalences have been found to be much higher for those involved with the justice system. For example, youth arrested in the past year were 2 times more likely to have used alcohol, more than 3.5 times more likely to have used marijuana, and between 3-20 times more likely to have used hard drugs.[7] Similarly, adolescents who were involved with the criminal justice system had approximately 5 times higher rates of substance use [20] and 3-4 times higher rates of substance use disorders than youth not involved with the criminal justice system.[12,20]

Ethnic differences have also been found with a national sample of justice-involved youth in the U.S. [12] Non-Hispanic European American and Hispanic youth reported higher rates of substance use than African American and Asian American adolescents. However, American Indian/Alaska Native and multiracial youth had higher rates of certain substance use (e.g., daily use in months prior to placement, use at the time of

the offense). No statistically significant use was noted for Native Hawaiian/Pacific Islanders (i.e., over two-thirds under the influence at the time of current offense).

Although sparse, research in Hawai'i has been conducted on the intersection between adolescent substance use and conduct behaviors, including justice involvement. These can be classified into 2 categories: (1) self-reported epidemiology, and (2) institutional statistics.

Baker, Hishinuma, Chang, and Nixon[21] found a statistically significant, positive relationship between self-reported lifetime use of drugs and violence perpetration for Filipino American, Native Hawaiian, and Samoan youth in Hawai'i. Consistent with this result, the National Center on Indigenous Hawaiian Behavioral Health found adolescent self-reported substance use and, in particular, smoking cigarettes regularly, robustly and positive related to "was arrested or got in serious trouble with the law," school suspensions, and school infractions for Native Hawaiian and non-Hawaiian youth.[22, 23]

For Hawai'i, the proportion of youth charged with drug-related offenses underestimates the actual prevalence of substance use among young people involved with the juvenile justice system. A study by the State Attorney General reported that 10.0% of youth arrests were for drug offenses and only 12.0% of the arrests were for unique individuals with a drug offense.[25] The social histories of youth who undergo formal processing with the juvenile court reveal a much higher incidence of substance use. A random sample of youth adjudicated in Honolulu County for any law violation indicated that 71.8% of youth had a history of substance use recorded in their probation case files.[26] Although over-representation of Native Hawaiian youth in the juvenile justice system is a persistent phenomenon, the same study found no statistically significant differences for indicated substance use history between Native Hawaiian youth and youth of other ethnicities[27] after having reviewed the diagnostic medical records for youth detained at the Hawai'i Youth Correctional Facility (HYCF). Approximately three-fourths of the youth were diagnosed with substance abuse or substance dependency. In addition, for the data that were available, 96% had a history of substance use, with the most commonly used substance as follows: 91% marijuana, 86% alcohol, 71% cigarettes, and 54% methamphetamine. The earliest average start of substance use was with cigarettes (11.9 years of age); the latest use of substances involved methamphetamine (14.1 years of age). Further, history of hard drug use was one of the most salient risk factors associated with recidivism.[28] In a more recent profile of youth incarcerated in Hawai'i, the proportion of youth who had received at least one substance use disorder diagnosis increased to 83.6% and the entire study population reported a history of substance use.[29,30]

Specific ways to measure disease burden

There are different methods to measure substance use for adolescents, including those who are involved with the justice system.[31] First, a urine drug screen is an objective, biological method of determining drug use, although cautions should still be noted (e.g., differing lengths of detection, synthetic variations may not be detected, false positives). Second, epidemiologic surveys are self-reported questionnaires that

are administered in large groups or via online. The two most-common U.S. national surveys are: (1) Youth Risk Behavior Survey, and (2) Monitoring the Future.[32] Third, clinical scales are relatively brief instruments completed by the youth and/or stakeholders, including parents, caretakers, teachers, and healthcare and social service providers.[31] Fourth, substance use histories are typically obtained during the intake process of clinical services. And fifth, formal diagnosis of a substance use disorder is completed as a result on a complete psychiatric evaluation based on the *Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (DSM-V).[33]

Social Ecological Model Framework

The social ecological model is a valuable construct commonly used to map the risk and protective factors that may influence physical, mental, and behavioral health across different levels or domains: individual, interpersonal, communal/institutional, and societal,[34-37] Many of the factors aligned with risk of or protection from substance use for justice system-involved youth can be understood as spanning multiple domains of the social ecological model. Research and interventions to reduce or prevent youth substance use often center on decreasing risk or enhancing protective factors at the individual and interpersonal levels, with promising work addressing individual behavioral change in step with environmental change at the community or institutional level. [38,39] However, equal if not greater investment must be made to intervene at the societal and institutional levels with changes to legislation, policy, and practice to further protect and support youth who are involved with the justice system, the vast majority of whom are also impacted by substance use. Unfortunately, research has focused less at the institutional and societal levels. These broader domains come into sharper focus through the lens of racial and ethnic disparities, considering the intersection of youth development, risk-taking behavior, perceptions of delinquency, and the uneven impacts of institutional policies and practices on communities and families of color. Observations from the literature are highlighted below, focusing on the levels beyond the individual.

Family

The centrality of family in a young person's life is evident. Understandably, disruption to family and home dynamics has been found to impact youth behavior, with positive family functioning and active parent presence related to lower rates of youth engaging in substance use and anti-social behaviors.[40] Research among youth re-entering home and community after incarceration found that family conflict correlated with increases in recidivism and polysubstance use, as well as increases in delinquent peer associations during the re-entry period.[41] Elevated likelihood of substance use disorders (46.9% increase) were observed among youth who reported family relationships characterized by a high rate of parental hostility in a national study.[42] Among youth incarcerated in Hawai'i, significant disruption to family structure, including negative impacts to relationships with the child's primary caregiver were observed in 91.2% of the case files.[30]

The well-being of family members can serve as a protective or risk factor for children as well. Generational involvement with the criminal justice system and/or substance use has been studied in national and local research. Davis and colleagues[42] found that

youth who experienced the arrest or jailing of a family member showed a significant increase in the risk of substance use disorder (8.4%), while those who reported having a parent with a current or past drug problem was associated with a 32.5% increase. The rates of reported substance abuse among family members (16.4%), parental mental health needs (47.4%), and parental justice system involvement (66.1%) in a study of incarcerated youth in Hawai'i were striking.[30]

Peers

Recent research on substance use among adjudicated youth upheld the standing of peers as highly influential, where a higher proportion of friends engaging in anti-social behaviors was associated with increased substance use problems. Peer relationships and attitudes also significantly predicted future recidivism, which in turn elevated risk of continued substance use problems.[42,43] Local research aligns with national findings on increased adolescent substance use associated with negative peer behavior, such as youth whose friends have offered them marijuana or alcohol or whose close friends who have been suspended from school.[44]

Social support vs. social stigmatization/discrimination

Youth who reported experiencing institutional discrimination, peer discrimination and educational discrimination were found to be at higher risk of addiction. Conversely, social support spanning the interpersonal domain, such as parent, peer, and teacher support, was shown to mitigate negative effects of discrimination on youth in the justice system, including substance dependency.[45] Addressing adolescents' needs for belonging and contributing to pro-social and supportive community life can be a protective factor against negative outcomes associated with social isolation. Research on youth adjudicated for serious offenses suggested an association between social isolation and increased risk of relapse with substance use.[46] While this local research base is not well-established for Hawai'i, perceptions of differential treatment on the basis of ethnicity and race have been expressed by youth interviewed on their experiences in the state system of care for substance use.[47]

Societal Domain

Expanding the argument of social stigmatization versus support at the level of policy, laws, and rules, researchers have been advocating for a developmental approach to juvenile justice that addresses disparate treatment on the basis of race and ethnicity. By this logic, youth of color whose developmentally appropriate expression of "recklessness" have been viewed as culpable and systematically disciplined by the justice system, would be viewed and treated with the same understanding of adolescent exploration and boundary-testing that is commonly extended to White youth.[48-51]

Trauma and Marginalization

Vulnerability to trauma and marginalization is a common theme among youth involved in public systems such as child welfare, juvenile justice, and mental health. Studies of trauma have established links between adverse childhood experiences and increased risk of physical, mental, and behavioral health concerns, such as chronic disease, depression, thoughts of suicide/self-harm, and problematic substance use.[52,53]

The relationship of marginalization and multigenerational transmission of trauma has been well-documented among Black, Indigenous, and other communities of color that continue to overcome the "present pasts" of collective trauma, such as slavery and colonization, a reality that "reflects not so much past trauma as ongoing structural violence."[54-57] Through intensive ethnographic research on juvenile delinquency, Vigil and Moore[58] coined the term "multiple marginality" to explain the intersection of social and economic forces faced by some low-income youth of color, manifested in "inadequate living conditions, stressful personal and family changes, and racism and cultural repression in schools."[58-60] For girls and gender-diverse youth from these communities, trauma and marginalization have been directly associated with increased likelihood of running away and status offending that leads to justice system involvement.[61-63] Histories of trauma and runaway were present in case files of over 90% of youth incarcerated in Hawai'i.[30]

Demographic Characteristics

Substance use among the population of youth involved in the juvenile justice system has been established as a pervasive concern. The over-representation of youth of color in the justice system exacerbates the health disparities in this respect. Although youth of color account for approximately 30% of the nation's minor population, they are more likely to experience arrest, juvenile detention, and revocation of probation than White youth, while controlling for other legal factors.[64,65] National- and state-level research has demonstrated that youth of color face a marked and persistent disadvantage in the very system that exists to ensure justice.[66-70] Anti-black bias in situations where decision-makers are given discretion over youth outcomes remains particularly egregious, with Black families being disproportionately perceived as uncooperative or unstable and Black youth facing a higher likelihood of being documented as non-compliant by probation officers, receiving more intensive probation conditions, and fewer referrals to diversion programs than similarly situated White youth.[71-75] Statewide analyses of juvenile justice system decision-making have found that Native Hawaiians, Samoans, and other Pacific Islanders faced a consistent and cumulative pattern of negative outcomes[26,76] than their White or East Asian counterparts.

As mentioned in the discussion of trauma as a risk factor for substance use among juvenile justice-involved youth, higher rates of victimization are correlated with status offenses, such as runaways and truancies. With respect to sex/gender, these trends are particularly pronounced among girls and point to the gendered perspective of substance use vulnerability experienced by girls, which may be elevated by cultural and social norms.[57,63,77-79] Nationally, gender differences tend to be elevated among youth in the juvenile justice system, with disproportionate representation in state juvenile justice facilities of self-reported gender diverse youth, i.e., "gay, lesbian, bisexual, or other sexual orientations."[80-82] Locally, data on sex or gender identity have not been systematically collected for justice-involved youth. The recent Hawai'i Student Alcohol, Tobacco, and Other Drug Use Survey found that adolescents who identified as girls or gender-diverse were at higher risk of problem substance use than boys (13.3%, 24.4%, and 10.7%, respectively).[44]

CURRENT SYSTEM OF CARE IN HAWAIʻI

For decades, the public education, mental and behavioral health, child welfare, and juvenile justice systems in Hawai'i have sought to institutionalize a state "system of care" (SoC). The goal of the SoC is to provide evidence-based services using a community-based, culturally and linguistically responsive, family-centered approach.[83] The SoC concept implies coordination between family, community, non-profit organizations, for-profit entities, and state agencies so that people in need of care can identify, connect with, and receive appropriate and individualized services and supports. By mapping existing resources and relationships, areas for improvement and potential changes to align the actual SoC with these ideals can be more easily identified. Figure 1 offers a simplified depiction of the youth justice process in Hawai'i and the corresponding supports and substance use services that are available to youth on a voluntary or mandatory basis at each stage. The justice system operates as a filtering process; each block in Figure 1 represents a decision point where a youth may either exit or become further involved in the system.

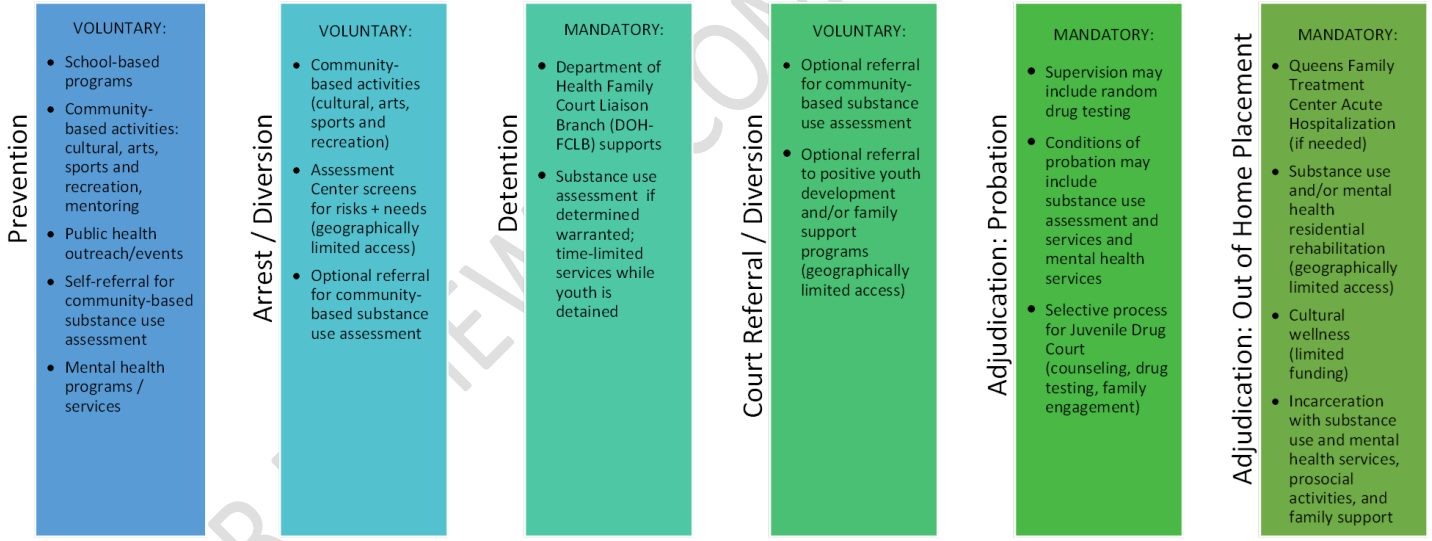

Figure 1. Juvenile justice process in Hawai'i and the supports and substance use services for youth

Prevention

Starting from the left on Figure 1, prevention of substance use is the most critical component in the SoC for youth well-being and health; yet a systematic approach to implementing and sustaining prevention programming is lacking. Substance use programs and supports spanning the continuum of care from prevention to treatment are available to youth in schools, through educational health curriculum, counseling with Behavioral Health Specialists, and school-based services contracted by the Hawai'i State Department of Health Alcohol and Drug Abuse Division (DOH-ADAD). However, student access to services at a school-level is highly dependent on individual school administrators' awareness of student needs. Common barriers to accessing services such as clear eligibility guidelines and coordination and communication between school-based providers and school staff can be addressed effectively by administrators

who place a priority on caring for student substance use. Prevention activities in communities are offered on a wide, but inconsistent basis, with voluntary community-based activities that integrate substance use education and awareness into public events like health fairs or positive youth development programming, such as sports, cultural arts, and mentoring. At the same time, not all prevention programs are equipped to help youth address problems that may increase their vulnerability to substance use, such as disruptions in family structure and home environment or challenges at school.

An informal network of prevention providers is active through grassroots volunteerism, public sector City and County Department of Parks and Recreation programs, and nonprofit youth-serving organizations like the Boys and Girls Club. Some nonprofit organizations are contracted by DOH-ADAD to facilitate substance use prevention curriculum through community-based outreach or school-based programs (e.g., Hina Mauka Teen Care or the Kalihi YMCA). These state-funded providers use the standardized Adolescent Drug Abuse Diagnosis to assess level of need for adolescent clients. Community-based substance use prevention programs may also be funded by the Hawai‘i State Department of Human Services Office of Youth Services (DHS-OYS), which under some administrations has prioritized outreach to justice system-involved youth in the past. Native Hawaiian trusts and entities, such as Kamehameha Schools and Office of Hawaiian Affairs (OHA), have also invested in community-based programming to address substance use prevention through engagement in cultural activities, including family-centered approaches where youth may participate with parents and/or other supportive adults such as Keiki O Ka Aina (KOKA) family workshops and Alu Like activities. KOKA’s Strengthening Families Affected by Incarceration (SFAI) program focuses on support for children impacted by a caregiver’s incarceration. The main challenges of the prevention realm of the SoC are the consistency of funding, the alignment between available programs and community acceptance and trust, and the voluntary nature of the activities when so many youth at risk of justice system involvement may not have close adult support or natural pathways to connect with the resources being offered.

Arrest / Diversion

At the point of contact with law enforcement, a young person can be arrested or diverted on the basis of either formal criteria for diversion or in some cases, officer discretion. Arrest records are forwarded by law enforcement to the Prosecutor’s office (for law violations) or Family Court (for status offenses). In jurisdictions with the resources for more formalized diversion programming (currently limited to East Hawai‘i, Kalihi-Moanalua, and Leeward O‘ahu), a police officer can refer and, in some cases, transport a youth to an assessment center for screening and services in a therapeutic, family-friendly setting. Voluntary referrals to positive youth development activities and/or substance use education or assessment can occur, as well as connections to other resources appropriate to the assessed needs and strengths of youth. Truancy prevention programs in certain jurisdictions can operate in a similar way, where students who are referred for absenteeism may connect with a case manager who can engage the youth in an assessment of risks and needs. A subsequent referral to voluntary substance use services can occur. Common providers of adolescent

substance use services include Care Hawai'i, Child and Family Services (TIFFE), Hale Kipa, YMCA, and Hina Mauka. The DOH Child & Adolescent Mental Health Division (CAMHD) provides integrated substance use treatment for youth with qualifying mental health diagnoses. Similar to the prevention realm, at the point of arrest or diversion, the connection of youth to needed services relies on voluntary participation, most often requiring some degree of adult support for the child to participate fully and regularly.

Detention

Hawai'i has a single youth detention facility located on O'ahu and operated by the State Judiciary Family Court, with capacity for short-term secured placement prior to being seen by a judge for charges. For a young person who has been arrested in the past or their current arrest was made on suspicion of a serious law violation, police officers may transport the youth directly to the detention facility for immediate court intake. In this case, a youth could be held in detention to await a hearing within 48-72 hours. Following this detention hearing, a young person could be released or remain in secure custody for as long as several months awaiting the completion of the hearing process or until another appropriate placement can be made. The SoC for youth in detention provides a mandatory clinical screening for substance use and mental health needs, completed upon intake and corresponding services are provided based on the assessment. The time-limited access to services and the major life disruption that youth experience in detention, as secured, out-of-home confinement, seriously infringe on the effectiveness of the substance use care that youth in detention receive. Although culturally responsive programming has been identified as a priority by Family Court, detention facility services skew toward traditional forms of clinical compliance, with culturally aligned opportunities offered only on an as-available basis. After-care upon release from detention is neither required nor well-coordinated.

Court Referral/Diversion

Diversion from further involvement with the justice system can also be initiated by a court officer who receives a referral for an arrest, forwarded by the prosecutor's office. A young person can be "diverted" by the court officer simply closing the case after a phone call or meeting with the child's guardian, or even after an unsuccessful attempt at contacting the guardian. Participation in substance use services on a voluntary basis can be recommended at the point of diversion. In a promising development, the Family Court First Circuit (Honolulu County) Juvenile Probation and Intake Section (JIPS) plans to pilot use of the CRAFFT2, a validated screening tool for adolescents, in order to identify substance use treatment needs at the point of court intake. Implementing screening, brief intervention, and referral to treatment (SBIRT) for substance use, mental and behavioral health needs in settings such as schools, health centers, and community sites, is a proven intervention that can be effective in connecting youth to services at the early end of prevention-intervention.[84] In another example, the Kokua 'Ohana Aloha (KOA) program is contracted by the First Circuit to facilitate seminars with youth and guardians, using a curriculum that addresses substance use prevention as well as improving family communication. The voluntary nature of participation in care at this point of court diversion relies on the initiative of the youth and a supportive adult; KOA program completion is offered as an incentive to avoid formal court

processing. Failure to complete the KOA program or the decision by a court officer not to divert will both result in the youth's case being formally processed by the court.

Adjudication: Probation

Placement on probation upon adjudication is one possible pathway for youth whose cases are not diverted and are found guilty or adjudicated in juvenile court. An adjudication carries the consequences of an immediate set of conditions determined by a judge. One of the more serious conditions is probation placement (also known as court supervision or monitoring) with conditions placed upon the youth. Conditions may include, but are not limited to, regular appointments with a probation officer, curfew, school attendance, electronic monitoring, drug testing, and community service. Although not directly illustrated in Figure 1, a significant consequence of probation placement is the increased risk of being court-ordered to residential placement for a violation of the terms of probation. Even seemingly minor infractions, such as skipping school, a "dirty" urine test, or missing a meeting with a probation officer, can lead to a child being removed from their home and, in the worst-case scenario, incarcerated. The mandatory nature of probation conditions ensures that youth are accessing services that have been court-ordered, although the cultural fit of these services is not necessarily addressed. In certain jurisdictions, "boutique courts" for youth are accessible through a selective process. For example, Juvenile Drug Court and Girls Court both operate in the First Circuit (Honolulu County) and when funding is available on neighbor islands, these agencies provide more intensive family engagement, substance use counseling, and drug testing.

Adjudication: Out-of-Home Placement

At the far right of Figure 1, the downstream services in the SoC are mandated when a Family Court judge adjudicates a youth and orders the adolescent to out-of-home placement. This is the most severe sanction for a youth; that is, removing a child from their home and family setting. Out-of-home placement may range from incarceration in the sole secured Hawai'i Youth Correctional Facility (HYCF) located on O'ahu to court-ordered participation in a residential program, such as a mental health facility, a substance abuse treatment program, a group home, or military-type academy. Youth who do not have a placement option readily available to them may be placed in the short-term youth detention facility pending an opening in the youth prison or a residential program.

Medical and clinical responses are listed in Figure 1, beginning with Queens Family Treatment Center Acute Hospitalization for youth suffering from possible overdose or other pressing physical or mental health needs (e.g., imminent harm to self or others). Bobbie Benson is one of very few clinical residential recovery programs for youth substance abuse. Family Court contracts bed space for youth with assessed need for this level of care. Most of the other types of residential placements are not focused on substance use services, but incorporate education and coping skills into their curriculum, ranging from the paramilitary Youth Challenge program (operated using both state contracts and private funding) to wellness programs grounded in Native Hawaiian culture like the Ke Kama Pono Safe House operated by Partners in

Development Foundation or the Wahi Kahaʻaho cultural learning center (not currently in service). Services for incarcerated youth range from the mandatory substance use "groups" that offer weekly lessons using curriculum, such as "7 Challenges," or grounding in cultural values and practices to address coping skills, behavioral change, and health effects of drug use. Clinical services corresponding to any substance use disorder and other mental health diagnoses may also be recommended based on intake and regular assessment. The SoC operates with the most efficiency with compulsory services at the point of out-of-home placement, particularly in the secured facility. Case file notes for youth at HYCF sometimes include histories of referrals to outpatient substance use services that were not completed prior to incarceration. For youth with a qualifying diagnosis for mental health services, integrated substance use treatment is available through the State of Hawaiʻi Child and Adolescent Mental Health Division (CAMHD) contracted services such as Multi-Systemic Therapy (MST). Once youth are confined in the secured facility, participation in services is compulsory. Prisons have become sites for the provision of compulsory services, not because they are efficacious, but due to the lack of state funding and support for more nurturing environments that can meet their needs.

In summary, the Hawaiʻi SoC for substance use among justice system-involved youth is a loose constellation of supports that delivers services in a fairly unsystematic manner. At the early stages of justice involvement, the challenges to prevention and diversion include inconsistency of funding, mis-alignment between available programs and community acceptance and trust, and the requirement for adult permission for youth to participate in most interventions, which disadvantages youth who lack the support of adult caregivers. Exacerbating economic vulnerability, the cost of substance use assessment and treatment at the early stages of justice-system involvement are often placed on families, with public support available for only those who can navigate the eligibility process and meet the required criteria. Even youth on probation are not systematically assessed for substance use needs, due in part to hesitation by court officers to incur the associated costs. At the downstream end of the system, the availability of out-of-home placements for youth who need substance use treatment has dwindled, leaving only one stable provider (Bobbie Benson), albeit with limited bed space. Smaller residential substance use programs that integrated life skills and local cultural values, such as the now-closed ocean-based Kailana Program operated by the Marimed Foundation, have struggled to maintain sufficient funding. The HYCF has been termed a "provider of last resort" where adjudicated youth are able to access intensive mental health and/or substance use services that are otherwise in short supply in the community.[5,26] If youth are incarcerated, then they undergo mandated mental health evaluations, substance use histories are recorded, and formal diagnosis of a substance use disorder (SUD) may result from a full psychiatric evaluation. For youth who are diagnosed with an SUD, service plans include compulsory treatment provided by the state while confined.

Between the two extremes of prevention and incarceration, a missed opportunity presents itself for screening and early intervention among youth who may be arrested and diverted or awaiting court processing. Even among youth who are adjudicated and placed on probation, current practices allow most to continue at elevated risk of

substance use without a formal assessment or referral to services. In a recent statewide youth needs assessment, local youth frequently described "getting in trouble" at school or with the law as their primary entry point to substance use treatment.[47]

However, efforts to transform Hawai'i's youth justice system have gained traction, most significantly since the state's entry into the Juvenile Detention Alternatives Initiative (JDAI) in 2008. The Annie E. Casey Foundation, Pew Research Institute, Vera Institute of Justice, Consuelo Foundation, and Cooke Foundation are only a few of the entities that have made significant contributions of funding and/or technical assistance to Hawai'i over the past 20 years. As part of this social movement, leaders of key youth-serving agencies (DHS-OYS, CAMHD, Family Court, Prosecutor, Public Defender) and community-based organizations (Hale Kipa, Hawai'i Families as Allies, various culturally grounded programs) have committed to collaboration and participated in training and national learning exchanges for justice system reform. Family Court made marked improvements in data collection and reporting for detention and probation, and substantial decreases in the number of youth detained and incarcerated have been sustained, with youth commitments to HYCF reduced by 84% between Fiscal Years 2009-2021[85]. In 2014, a consortium of leaders played a key role in collaborating to introduce comprehensive legislation (Juvenile Justice Transformation Act 201) to improve probation training, practice, and accountability for Family Court and to reduce youth commitments and implement transition planning for HYCF. That groundbreaking legislation opened the door to rename and redevelop the HYCF campus as the Kawailoa Youth and Family Wellness Center, allowing co-location of community-based programs to serve vulnerable youth with culturally grounded mentoring and support, in addition to education and vocational training pathways. This ecosystem of programs at Kawailoa in partnership with community-based organizations as part of a SoC offers promising alternatives to long established punitive approaches.

RECOMMENDATIONS FOR TRANSFORMING THE SYSTEM OF CARE

System transformation: Reframing policy and practice responses to care for vulnerable youth

A closer examination of gaps in the existing SoC reveals that the status quo is not working. The current SoC for youth in Hawai'i is guided by a punitive and paternalistic response to the needs of youth and their families that fails to acknowledge and honor their humanity, dignity, and cultural roots. Rather than illuminating and addressing the social determinants of health that can decrease young people's likelihood of risky behavior, including substance use, the punitive approach labels youth as delinquent or criminal. This label justifies exerting discipline and control over the youth. Once the youth is in state custody, they are then assessed, and mental health and substance use services are provided according to formal evaluation of need. Although informal links to services are technically accessible for youth via a range of entry points, such as self-referral through Hawai'i Coordinated Access Resource Entry System (CARES), School-Based Behavioral Health (SBBH) assessments, and community-based screening, the

dominant narrative remains one of finally receiving services through formal, mandated justice system intervention. There are currently no restorative justice or culturally based programs that tap the wealth of cultural knowledge and practices that have shown promise, particularly with populations overrepresented in the youth justice system in Hawai'i.

Two sets of recommendations offered here reinforce lessons learned over the decades-long journey to improve the Hawai'i SoC for substance use and transform the youth justice system. Our aim is to address the primary obstacles to sustaining collaborative and community-based alternatives that emphasize promising or evidence-based healing, trauma-informed, culture-based, and family-centered approaches. This entails shifting resources from punitive responses to a comprehensive array of community-based services, focusing on youth substance use as a public health issue rather than a criminal justice issue. Sustaining this shift requires sustained leadership, training to shift the paradigm of the youth justice profession towards a more culturally appropriate and developmental approach, and continual succession planning. We detail these two major recommendations below.

Recommendation 1. Shift to restorative justice and culturally-grounded approaches

The first set of recommendations is to shift resources from high-cost carceral measures to a restorative and culturally-grounded model of care to identify and seek healing for root causes of substance use and other behavioral health concerns among youth. A restorative justice approach takes a holistic view of the interrelationships among multiple domains of individual, family, community, and society; and illuminates the need to address place-based, family-centered, and spiritually appropriate methods of healing.

By capturing the Family Court and DHS-OYS cost-savings and redirecting to support front-end community outreach and services, the state can implement a restorative public health approach to increase early identification of needs and expand access to prevention, intervention, treatment, and other supports for youth. Hawai'i offers a compelling case for decarceration, a concept aligned with Justice Reinvestment legislation that diverts funding from the justice system apparatus in favor of increasing funding for social services.[48,86] As youth probation caseloads and the number of youth admitted to HYCF have declined, savings from the decrease in punitive measures can be recaptured and reinvested in support of prevention and wellness for youth in the context of their families and communities. Commitment to continual evaluation should accompany implementation, to provide monitoring and feedback to inform modifications. Investments can be shifted to fill the following gaps in the continuum of care and aid the shift towards restorative approaches:

Culturally grounded healing programs

Two prototype programs developed on the island of Molokai address youth and family substance use utilizing a framework of Native Hawaiian cultural practices for healing and wholeness.[87,88] Puni Ke Ola promotes culture as health, strengthening protective factors through cultural practices and learning. Kahua Ola Hou has served as a diversion

site for youth at various stages of the Hawai'i youth justice system and cross-trains youth justice staff and community partners in a cultural curriculum that has gained traction with local youth of diverse backgrounds.[89] Youth learn the practices of self-reflection and ho'oponopono to address root causes of health concerns like substance use and to heal family relationships. The focus on teaching youth to become healers was operationalized by Native Hawaiian ways of learning and being, where program staff engaged in activities alongside youth, modeling how to live out values like malama (to care for), how to listen and humble oneself and the recognition that "when kids using substances, they just trying to heal themselves…We try like teach them to heal themselves in a pono (morally right) way."[90] By centering healing practices in the young person's process of addressing substance use, self-efficacy is developed for not only the individual, but within the family. In tandem with these interventions, rigorous and culturally responsive evaluation is vital to build an evidence base that takes into account the unique social-cultural context of youth in Hawai'i. The Kukulu Kumuhana framework for Native Hawaiian well-being is one example of a collaborative local evaluation design created by Lili'uokalani Trust, Office of Hawaiian Affairs (OHA), Kamehameha Schools, and Consuelo Foundation to build an evidence base for place- and culturally based interventions that are relevant for Hawai'i.

Family-based interventions

Family-based interventions have been associated with decreases in substance use and increases in protection against risk factors for other delinquent behaviors.[91,92] Among clinically referred youth, Multi-Dimensional Family Therapy has demonstrated reductions in substance use and other risky behaviors for youth. [93] Multi-Systemic Therapy (MST) has a robust evidence base for reducing risky behavior, including substance use.

School-based interventions

For students at risk for justice-system involvement and substance use, effective school-based interventions should address: (1) cultivating meaningful relationships and learning environments for students who feel disconnected from school to help to prevent early substance use; (2) providing universal screening to identify students with substance use needs for referral [84]; and (3) through screening, identifying and making warm hand-offs to services for students with co-occurring mental health and substance use needs and/or students who have experienced trauma.

Workforce development

Investment should be made in workforce capacity and professional development of providers to effectively address substance use among justice system-involved youth. DOH-ADAD and higher educational institutions in Hawai'i have the opportunity to formalize an educational and training pipeline for Community-based Prevention Specialists, a federally recognized prevention position that is equivalent to the Certified Substance Abuse Counselor (CSAC) position. Community-based trainers with lived experience could facilitate self-reflective and interactive training curricula to address trauma, bias awareness, cross-cultural competency, and adolescent brain development. [26] Providing specialized training on substance use screening and scoring to assessment center and other youth-serving program staff could improve early assessment of behavioral health concerns and treatment needs.[94]

Housing and residential programs

Restorative justice residential alternatives include home confinement, shelter care, group homes, intensive supervision, and specialized foster care.[95] Social stigma as well as zero tolerance policies for substance use or criminal convictions in public and some subsidized housing communities can create additional obstacles for vulnerable youth and young people on their healing journey. [4] From a harm reduction perspective, access to stable housing and other basic needs can serve as a foundation from which young people can more effectively identify and pursue their strengths while working to address areas of vulnerability such as substance use. [3,96]

Recommendation 2. Collaborative leadership to sustain restorative shift

The second set of recommendations focuses on the development of the collaborative leadership needed to sustain commitment to the restorative public health approach described in the first recommendation. Recognizing the tension between goodwill shared by many state stakeholders to "work together to care for our kids" and the heavy bureaucracy that is a core characteristic of the state apparatus, an ethic of partnership among state, community, youth, and families is needed in leadership across the state SoC. By centering voices from community, including the lived experiences of youth involved with the justice system and substance use, leadership of the Hawai'i system of care can stay in touch with trends on the ground and continue to shape policy, practice and funding responses so that our state interventions lead to positive outcomes. Interagency collaboration with nonprofit partners is improving coordination of services for youth in certain local communities; these success stories offer lessons for expanding collaboration system-wide. Existing capacity for collaborative leadership in the state has been built through technical assistance and training opportunities; such external resources can continue to sustain further leadership development for system transformation. Specific recommendations include:

Support for youth and community leadership in system transformation

Over the past decade, centering youth and community voices in leadership and decision-making has been a growing priority for system change.[97,98] Justice for Families (J4F) is a national collaboration founded and operated by families with lived experience of juvenile justice system involvement. The J4F approach of building the capacity of youth and families as leaders of change in the justice system has resonance for aligned efforts in Hawai'i. One local model for youth voice and advocacy to shape child welfare policies and practices has been sustained through a partnership between the Hawai'i Department of Human Services-Child Welfare Services (DHS-CWS) Branch and the Hawai'i Helping Our People Envision Success (HI H.O.P.E.S.) Youth Leadership Board developed by EPIC 'Ohana, Inc. Institutionalizing authentic youth-adult partnerships in system change promises multiple gains: improved outcomes for youth leaders, and in turn, their future contributions to their communities; as well as system-level changes that advance the objective of centering youth in system funding, policies, practices, and culture.[99]

As an example of cross-system transformation in Hawai'i, youth and young adult leaders and mentors involved with HI H.O.P.E.S. have also been building capacity for such

partnerships in the governor-appointed Hawai‘i Juvenile Justice State Advisory Council (JJSAC). With this support, the JJSAC Youth Committee members who are currently system-involved or have successfully transitioned out of the youth justice system, as well as JJSAC members who are parents of system-involved youth, provide consultation and recommendations on improvements to state justice system policies and practices for youth, including adolescent substance use services and supports.

Collaborative leadership for coordination of services

Access to substance use services for youth who are not court-ordered, detained, or incarcerated is limited by a number of factors, including space (e.g., bed space at a residential facility such as Bobbie Benson), eligibility (e.g., qualifying clinical assessments), awareness of services, and alignment or cultural fit of available services for the youth and family. Differential access to services due to language, mobility, geographic isolation, and affordability of private services may also affect youth and families who have more difficulty accessing needed prevention or treatment services.[47] Programs requiring parental participation may create a barrier for the most vulnerable youth whose relationships with caregivers may be strained or disrupted. These limiting factors highlight the opportunity to strengthen the Hawai‘i SoC for justice system involved youth through coordinated efforts across sectors.

Several small-scale collaborations to divert youth from the justice system offer “living examples” of coordination to identify needs, strengthen protective factors, and connect to supports at early stages for behavioral health problems. The Positive Outreach and Intervention (P.O.I.) Project operates a values-based mentoring model on Maui and Molokai that aims to divert youth from court involvement at the point of arrest and increase connections to supportive adults and cultural practices. Community-based practitioners bring together police officers, youth, and family members to learn about Native Hawaiian cultural sites, help with restoration efforts, and engage in healing practices. The Big Island Juvenile Intake and Assessment Center (BIJIAC) on Hawai‘i Island and two programs on O‘ahu the Ho‘opono Mamo Civil Citation Initiative in Honolulu Police District (HPD) 5 and HPD District 8 Mobile Assessment Center, were designed to take a culturally based approach to assessing immediate needs. By greeting youth and caregivers in a relational setting and making connections with the child’s natural supports, elders, and the broader community network, youth can access needed services and supports through direct, in-person referrals. BIJIAC leadership has engaged in collective problem-solving to reduce barriers to services, allowing youth of a certain age to consent to services when parents are not accessible.

Collaboration among state agencies serving youth and leaders in community-based and school-based settings can facilitate coordination of services for youth throughout the continuum of care. At the upstream end, prevention or early intervention for substance abuse and diversion from the justice system may be addressed in school and community settings through early screening, assessment, referral, and connection to appropriate supports, using standardized approaches, such as the Screening to Brief Intervention and Referral to Treatment (SBIRT) tool. At the downstream end for youth who are incarcerated, reentry and aftercare are transition periods where continuity of care can be critically important. DOH-ADAD and DHS-OYS leaders can institutionalize policies that support collaboration with community-based programs and youth-serving

nonprofits to improve treatment referrals and connections to care for youth returning home from incarceration or other residential placements.

Capacity building for collaborative leadership

External support from philanthropic partners and federal agencies has been effective in mobilizing local partners to come to the collaborative table for system reform, coordination of services, and data quality improvement. Hawai'i's partnerships with the Casey Family Foundation for child welfare reform and the Annie E. Casey Foundation, Pew Research Institute, and Vera Institute for Justice for juvenile justice transformation have been credited for the gains that the state youth justice system has realized in collaborative data-driven decision-making over the past decade. Presenting valid data that reflect the progress of collaborative reforms has become a self-perpetuating practice. The success of these efforts points to the promise of taking a similar approach focused on coordination related to substance use and justice system services. The Hawai'i Juvenile Justice Transformation (JJT) Steering Committee first formed as a working group to engage with the Pew Charitable Trust in 2014. The JJT is composed of representatives from the key agencies (law enforcement, Family Court, and HYCF) across the state that together are considered the formal youth justice system. In addition, representatives from CAMHD, and Department of Education (DOE) and various youth-serving community-based organizations also participate.

Hawai'i's capacity for collaboration to address the intersection of youth justice and adolescent substance use could be strengthened with technical assistance and training. Such opportunities are periodically promoted by federal agencies, such as the U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP) and Substance Abuse Mental Health Services Administration (SAMHSA). Forming a collaboration between the JJT and DOH-ADAD, and its youth-serving substance use providers group could help bridge gaps in coordination for the system of care for justice-system involved youth. Gathering key leaders from these collaborative bodies could extend discussions and collective problem-solving around substance use screening and assessment, referral, and access to services, and data quality, reliability, and linkages to inform research and evaluation. Establishing regular work group meetings could allow for relationships and trust to develop over time, and technical assistance and training grants could increase the effectiveness of this body to address persistent issues, such as improving referrals and connections between youth and relevant services.

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Intersections Among Family Violence and Substance Use

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Abstract

Intimate partner violence (IPV), child abuse and neglect (CAN), and substance use disorders (SUD) are three separate and widespread public health issues with devastating personal, health, and economic consequences for individuals and society. Although they are usually viewed as distinct and unrelated problems, they often occur together. Forty to sixty percent of IPV incidents involve the use of alcohol and other drugs (AOD); up to 80% of CAN cases are associated with the use of AOD; and up to 60% of CAN cases include IPV. Therefore, effective prevention and intervention strategies must treat these problems holistically and simultaneously and must address underlying and ongoing trauma. Unfortunately, existing social services systems are siloed and typically focus on one presenting issue. Funding sources, treatment, services, and outcome data are all tied to that single issue. When families suffer from co-occurring problems, siloed systems usually sequence services rather than collaborate to address problems concurrently. However, decades of research have established that a collaborative model of service delivery is more likely to lead to improved outcomes for children and families affected by IPV, CAN, and SUD than a traditional siloed model. Collaborative approaches respond to the inter-relationships among IPV, CAN, and SUD by ensuring providers deliver trauma-informed services and understand how and why these problems occur together; using data to better understand families' and systems' needs and improve programs and practice; removing barriers to program participation; and coordinating the provision of individualized, client-centered services.

Background & Introduction

Defining Family Violence

This chapter explores the intersections of intimate partner violence (IPV), child abuse and neglect (CAN) (often referred to as "child maltreatment"), and substance use.

Family violence is a broad category encompassing a range of abusive behaviors occurring among people in family-like relationships. This chapter uses the term IPV to refer to violence and abuse between adult partners, and CAN to refer to abuse and neglect of children under age 18 by parents or caregivers. IPV and domestic violence (DV) are often used interchangeably, but DV, which predates the term IPV, was originally used to describe male-perpetrated violence against a female intimate

partner. IPV is usually seen as a more expansive term that includes partners in heterosexual and Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) relationships. This chapter uses DV when the literature being referenced uses that term and when DV is the commonly accepted term (such as when talking about DV systems and survivors of DV).

The terms "victim" and "survivor" are both used in this chapter, depending on the context around the term and the source being cited. For example, the legal system, law enforcement, and often medical systems tend to use the term "victim," so references to information from those fields use that term. "Victim" is also the most common reference used for children who experience CAN. Advocates for DV victims tend to use the more empowering term "survivor," which helps restore a sense of autonomy to the victim and denotes a movement toward overcoming the trauma of the abuse and surviving the infliction of violence. "Survivor" is also often used for adults who were CAN victims as children.

Definitions from the Centers for Disease Control and Prevention (CDC) provide a common foundation for understanding family violence. IPV "includes physical violence, sexual violence, stalking and psychological aggression (including coercive tactics) by a current or former intimate partner."[1] Intimate partners are people who are or were involved in a close personal relationship. Psychological aggression is the "use of verbal and non-verbal communication with the intent to: a) harm another person mentally or emotionally, and/or b) exert control over another person,"[1] and may include coercive control, which can include controlling access to friends, family, money, communications, and activities.[2]

CAN includes physical, sexual, and emotional abuse of a person under the age of 18, and failing to meet the child's basic physical, medical, educational, and emotional needs.[3] Parental use or even abuse of alcohol and other drugs is not by itself a form of CAN. Instead, CAN occurs when substance use negatively impacts parenting, such as when children's needs are not met because of the parent's use of substances.

Each state has specific legal definitions of IPV, DV, CAN, and abuse of family members. Generally, state civil and criminal law definitions align with the CDC definitions above. A handful of states, including Hawai'i, specifically include coercive control in the definition of DV, and more than half the states have laws addressing the commission of acts of DV in the presence of a child.(HRS § 586-1, HRS §709-906)[2,4,5]

State laws define which relationships between adults and children may result in CAN. In Hawai'i, adults who can be considered perpetrators of CAN include parents, guardians, and adults residing with the child. Most incidents of CAN are handled as civil offenses through the child protection system; in Hawai'i, the Family Court has jurisdiction over CAN. If the child's physical injuries are significant, or an adult outside the statutory definition harms a child, those incidents are likely to be criminal offenses. In Hawai'i, HRS § 350-1[6] states that CAN results from "the acts or

omissions of any person who, or legal entity which, is in any manner or degree related to the child, is residing with the child, or is otherwise responsible for the child's care […].”(HRS § 350-1)[6]

Understanding the context in which aggression and violence occurs between intimate partners and acknowledging the diversity of situations and dynamics in which it occurs is crucial because these distinctions have implications for prevention, assessment, and interventions. Historically, advocacy and services for survivors and perpetrators of DV have focused on DV as a means of power and control with an identified perpetrator (usually male) and victim (usually female).[7] This is the predominant type of DV that social systems—such as law enforcement, the courts, DV shelters—are set up to address. Researcher Michael P. Johnson emphasizes the need to acknowledge that not all IPV falls into this type, which he calls “intimate terrorism” (sometimes called coercive controlling violence), and in which the male is almost always the perpetrator.[8] Another type of IPV that Johnson identified is “situational couple violence” (sometimes called common couple violence), in which both partners engage in verbal and physical abuse and aggression, with violence mostly limited to property damage or “minor violence” such as slapping. Either partner may be the aggressor or instigator, the violence may occur once or be part of a pattern of dysfunctional communication, and there is not an ongoing pattern of coercion or control.[9,10] The relationship dynamics between intimate partners may be associated with whether and what type of CAN co-occurs, and how the use of alcohol and drugs contributes to or is implicated in the relationship.

From the perspective of child well-being, verbal or physical aggression or violence between adults in a household, regardless of how it is characterized, negatively impacts children, even when CAN does not occur. “A meta-analysis of 188 studies on the psychosocial outcomes of child witnesses to DV” found that the outcomes of children who witnessed DV were not significantly different from those of children who were physically abused.[9] When children see or hear IPV or experience the impact of IPV (such as seeing bruises or adapting their behavior to minimize conflict), this is often referred to as “exposure to DV.” Exposure to IPV is an adverse childhood experience[11] that can cause severe emotional, mental, and physical harms to children. Without intervention, exposure to IPV as a child can cause lifelong harm and outcomes similar to those seen in CAN victims.[4]

IPV and CAN are significant public health problems throughout the world, with staggering health and economic costs.

Intimate Partner Violence (IPV)

Prevalence

IPV occurs at all socioeconomic levels, among partners of all races and ethnicities, and in heterosexual and LGBTQ relationships.[12,13] In the U.S., more than one in three women (36.4% or 43.6 million) and approximately one in three men (33.6% or 37.3 million) experienced contact sexual violence, physical violence, and/or stalking by an intimate partner during their lifetime.[12,14] However, only one in ten men (10%)

reported some form of IPV-related impact from these incidents while more than one in four women (25%) reported that impact. In addition, "nearly half of all women (47%) and men (47%) have experienced psychological aggression, such as humiliating or controlling behaviors."[14] DV statistics vary by data set and individuals' interpretations of the questions and their experiences. For example, a Hawai'i Department of Health (DOH) report on IPV said,

> ***"The Hawai'i Behavioral Risk Factor Surveillance Survey (BRFSS) data indicate that among those ever reporting IPV, 1 in 6 are women and 1 in 10 are men. The 2015 and 2017 Youth Risk Behavior Survey (YRBS) data for high school students indicate that approximately the same proportion of male students report physical dating violence (PDV) as female students. Definitions of IPV and PDV vary from individual to individual, which may account for the disagreement between data in the BRFSS, YRBS, and national research which indicates that victims of IPV are typically females." [15]***

IPV is perpetrated by people of all genders, but the most severe violence disproportionately affects women. In 2018, in homicides where the victim to offender relationship was identified, 92% of women killed were killed by someone they knew, and 63% were killed by an intimate partner.[16] IPV victimization can begin during adolescence. The National Intimate Partner and Sexual Violence Survey (NISVS) found that 26% of women and 15% of men experienced their first incident of IPV before age 18.[14] The 2019 Youth Risk Behavior Survey (YRBS) found that among high school students who were dating, in the most recent 12 months, 8.2% had experienced physical dating violence (9.3% of females, 7.0% of males) and 8.2% had experienced sexual dating violence (12.6% of females, 3.8% of males).[14]

Disproportionate representation among victims

Tables 1 through 3 show how IPV disproportionately affects people of color and indigenous people and sexual minorities.[17-19] As a reference point for examining rates by race, ethnicity, and sexual orientation, approximately 35% of women and 34% of men in the U.S. experience contact sexual violence, physical violence, and/or stalking by an intimate partner during their lifetime. Table 1 shows that much high percentages of people who are multi-racial, American Indian or Alaska Native, and Non-Hispanic Black are victims of IPV than people of other races and ethnicities. Table 2 shows that women who identify as bisexual, lesbian, and gay experience IPV at much higher rates than women who identify as heterosexual.

Table 1. Lifetime prevalence of experiencing contact sexual violence, physical violence, and/or stalking by an intimate partner by race/ethnicity (data from the National Intimate Partner and Sexual Violence Survey (NISVS) 2010-2012; adapted from Smith et al (2017)[18])

	Women	Men
Race/Ethnicity	Weighted % (95% Confidence Interval)	Weighted % (95% Confidence Interval)
Multi-racial	56.6 (50.5, 62.5)	42.3 (36.4, 48.3)
American Indian/Alaska Native	47.5 (38.9, 56.3)	40.5 (31.5, 50.1)
Non-Hispanic Black	45.1 (42.2, 48.1)	40.1 (36.5, 43.8)
Non-Hispanic White	37.3 (36.2, 38.5)	30.3 (29.2, 31.4)
Hispanic	34.4 (31.3, 37.6)	30.0 (26.9, 33.3)
Asian-Pacific Islander	18.3 (13.8, 23.8)	13.7 (9.8, 18.8)

Table 2. Lifetime prevalence of experiencing rape, physical violence, and/or stalking by an intimate partner by sexual orientation (data from the National Intimate Partner and Sexual Violence Survey (NISVS) 2010; adapted from Walters et al (2013)[19])

	Women	Men
Sexual Identity	Weighted %	Weighted %
Bisexual	61.1%	37.3%
Lesbian or Gay	43.8%	26.0%
Heterosexual	35.0%	29.0%

Table 3 shows the estimated rates of IPV among women in Hawai'i by race and IPV related to pregnancy, which is a time of increased risk of IPV for women. Among Native Hawaiian women, 17.5% experience IPV in their lifetimes, and 8.8% experienced IPV during their most recent pregnancy or within the year before that pregnancy. Information about IPV and pregnancy is obtained from the Pregnancy Risk Assessment Monitoring System (PRAMS) survey, which is a standardized site-specific and population-based survey sent to a random sample of women who have recently given birth. Among adults in Hawai'i overall, the estimated rate of experiencing IPV during one's lifetime is 15.8% among women and 10.2% among men.

Table 3. Estimate of IPV by race (adapted from Vergara et al (2018)[15])

	Estimated rate of IPV overall, BRFSS, 2013	IPV before and during most recent pregnancy, Hawai'i PRAMS, 2012–2015***
Other**	19.0%	4.5%
White	17.5%	3.6%
Native Hawaiian	17.5%	8.8%
Other Pacific Islander*	16.8%	7.6%
Japanese	8.6%	5.9%
Filipino	6.3%	6.1%
Chinese	5.2%	***
Other Asian*	4.6%	***

*This is a U.S. Census-based definition that includes detailed ethnic responses.
**This is a U.S. Census-based definition that includes more than one race and Hispanic or Latino origin.
*** Pregnancy Risk Assessment Monitoring System (PRAMS) data uses different racial categories than BRFSS.

IPV in Hawai'i

Data on the prevalence of IPV in Hawai'i is incomplete, at best. There is no central reporting or tracking system for IPV. Multiple agencies are charged with responding to IPV, and they do not use uniform definitions or collect consistent data. One piece of information available on an annual basis is the number of people receiving services through Hawai'i State Department of Human Services (DHS)-funded DV shelters. In state fiscal year (SFY) 2019, 3,037 adults and 865 youth participated in services including crisis intervention, advocacy, individual or group counseling and support group, criminal or civil legal advocacy, medical accompaniment, and transportation. These numbers do not represent unique individuals, though, because one adult could participate in multiple services and would be counted for each service.[20]

Another source of information to gauge the scope of IPV in Hawai'i is community-based agency statistics. Statewide, the majority of domestic violence services are provided by five agencies, with varying degrees of reach across the state: Women Helping Women, YWCA of Kaua'i, Parents and Children Together (PACT), Child & Family Service (CFS), and Domestic Violence Action Center (DVAC). Data from DVAC provide an example of available information: DVAC created or reviewed 10,048 safety plans in FY2021, and in the first three months of the pandemic (April-June 2020), DVAC staff had 10,347 client contacts, answered 787 Helpline calls, completed 2,428 safety plans and offered legal information to 2,613 survivors.[21] Eleven out of 12 Hawai'i DV programs participate in a single day national count of DV services conducted annually by the National Network to End Domestic Violence.[22] The annual census counts the number of victims served on the day of the count, the services provided, the number of hotline calls answered, the number of people attending prevention and education trainings, the number of unmet requests, and the nature of those requests. On September 10, 2020, 281 adult and child DV victims

received housing from DV programs, and 558 adult and child victims received non-residential assistance and services. On that day, Hawai'i DV hotlines received 93 contacts and 90 requests for services were made but unmet due to a lack of resources to meet victims' needs. Fifty-two percent of the unmet requests were for housing or emergency shelter.[22]

IPV and Substance Use

Several national research studies have found a robust relationship between substance abuse and IPV for both perpetrators and victims.[23,24] Two primary challenges in studying this relationship are separating the substance use from other factors contributing to or resulting from IPV, and establishing a causal relationship. Meta-analyses and a meta-ethnography of multiple studies have found that 23–63% of IPV incidents with a male perpetrator involve alcohol as a contributing factor. Furthermore, the consumption of alcohol by the male perpetrator increases the likelihood and severity of physical violence.[25] A literature review summarizing 16 articles about perceived reasons for IPV highlighted a general population study's findings that among perpetrators of IPV, 13% of female respondents and 35% of males "attributed their violence to 'being under the influence of, for instance, alcohol at the time.'" Among victims, 31% of male respondents and 45% of females said that being under the influence was the cause of their partner's violence.[26] The link between alcohol use and violence was also found by the Department of Justice (DOJ) in a study of intra-familial murder: more than half of defendants accused of murdering their spouses had been drinking alcohol at the time of the incident, and almost half of the victims had also been drinking.[27]

The literature on the relationship between IPV victimization and substance use finds a strong connection, and also acknowledges the complexity of the relationship and the lack of evidence regarding cause and effect.[28,29] Women with SUD are more likely to be victims of IPV, and female IPV victims are more likely to abuse alcohol and other drugs.[30] Between 25% and 50% of women in SUD treatment programs disclose IPV.[29] The relationship between substance use and victimization is impacted by the substances used, other risk factors including co-occurring mental health problems and trauma history, and the perpetrator's use of substances. Experts have found that some victims use substances to cope with their situation, some victims are more at risk because of their SUD, and some are forced to use by a partner.[23]

One study found that in a SUD treatment program, 90% of women had been physically assaulted and 95% had been raped.[31] Additionally, several studies have found that women participating in SUD treatment programs and women in the community with SUD experience significantly higher rates of severe violence from intimate partners during their lifetime.[32]

The relationship between SUD and IPV is significant enough that a Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Improvement Protocol on SUD and DV states that:

> *"the Consensus Panel concludes that failure to address domestic violence issues among substance abusers interferes with treatment*

effectiveness and contributes to relapse. Therefore, the Panel recommends that substance abuse treatment programs screen all clients for current and past domestic violence, including childhood physical and sexual abuse. When possible, domestic violence programs should screen clients for substance abuse." [30]

Child Abuse and Neglect (CAN)

Prevalence

Understanding the prevalence of and circumstances relating to CAN requires the use of federal and state reports, which include both overlapping data and distinct information presented in only the state or the federal reporting source. In addition, the information presented in either set of reports may vary from year to year.

The most prevalent type of child maltreatment in the U.S. is neglect, affecting about 75% of victims. In Hawai'i, the most prevalent type is "threatened harm," "which means any reasonably foreseeable substantial risk of harm to a child."(HRS §587A-4)[33] Younger children have higher rates of victimization and death: the national rate of CAN for children under the age of one is 25.1 per 1,000 children, while the CAN rate for all children aged 0–17 is 8.4. Also, 46% of CAN fatality victims are under age one.[34] Children of color are disproportionately victimized: American Indian or Alaska Native children have the highest rate of victimization (15.5). African American children have the second highest victimization rate (13.2) and the highest fatality rate (5.9).[34] Children of multiple races have the third highest victimization rate (10.3), followed closely by Pacific Islanders (9.0).[34] In Hawai'i, in calendar year 2019, 40% of confirmed CAN victims were Native Hawaiian or part Native Hawaiian.[35] The tables below provide additional information about children alleged or confirmed to be CAN victims.

Table 4. CAN Prevalence, adapted from U.S. Department of Health & Human Services (2021) and State of Hawai'i Department of Human Services Social Services Division (2020)[20,36]

	Total Children Reported as Alleged Victims	Referred for further investigation by CWS	Referred to Differential Response	Confirmed Victims	Victimization Rate
National*	7.9 million	3,668,951	586,995^	656,000	8.9 per 1,000 children
Hawai'i**	20,425	2,579	2,127	740	4.5 per 1,000 children

*Time period is federal fiscal year (FFY) 2019

**Time period is SFY 2019

Only 22 states reported the number of children referred to Differential Response (DR), which is an alternative to CWS investigation for children with a lower risk of maltreatment. DR usually includes voluntary services, and the child is not confirmed as a CAN victim.

Table 5. Types of Maltreatment, FFY 2020, adapted from U.S. Department of Health & Human Services (2022)[34]

	Medical neglect	Neglect	Other	Physical abuse	Psychological maltreatment	Sexual abuse	Sex trafficking	Total maltreatment type percent
National	2.0%	76.1%	6.0%	16.5%	6.4%	9.4%	0.2%	116.4%
Number of states reporting this factor*	41	52	21	52	47	52	35	
Hawai'i	0.8%	16.3%	90.7%**	10.5%	1.0%	5.7%	1.2%	126.3%

Note: one victim can experience multiple types of maltreatment, resulting in totals higher than 100%.

*Percentages are calculated using the number of victims in the states reporting that risk factor.

**"Other" includes Hawai'i's category of threatened harm, "which means any reasonably foreseeable substantial risk of harm to a child" and is codified in HRS §587A-4.

In addition to knowing the types of maltreatment children experience, it is helpful to understand factors in the home that make it more likely for children to be reported for or confirmed as victims of CAN. Table 6 below shows risk factors that were identified in the adult caregivers of confirmed CAN victims (federal data). Table 7 is specific to Hawai'i and shows the most common factors affecting adult caregivers that were directly related to CWS confirming CAN (state data).

Table 6. Percent of Child Victims with Caregiver Risk Factors (FFY2020),* adapted from U.S. Department of Health & Human Services (2022)[34]

	Number of Victims	Alcohol Abuse	Domestic Violence	Drug Abuse	Financial Problem	Inadequate Housing	Public Assistance	Any Caregiver Disability
National	626,159	15.8%	28.7%	26.4%	13.1%	8.2%	23.5%	10.7%
Number of states reporting this factor**	47	34	37	41	28	36	29	30
Hawai'i	1,342	12.6%	23.5%	49.3%	2.0%	10.6%	Data not reported	Data not reported

*The caregiver who has the risk factors may not be the perpetrator of the CAN

**Percentages are calculated using the number of victims in the states reporting that risk factor.

Table 7. Ten most common factors precipitating a Hawai'i incident of confirmed CAN, state fiscal year 2019, adapted from State of Hawai'i Department of Human Services Social Services Division (2020)[20]

Factors	# Children for whom factor was reported	Percent (children with this factor/total number of children [1,321])
Unacceptable child rearing method	807	59.6%
Inability to cope with parenting responsibility	772	57.0%
Drug abuse	533	39.4%
Mental health problem	212	15.7%
Physical abuse of spouse/fighting	203	15.0%
Heavy continuous child care responsibility	160	11.8%
Chronic family violence	146	10.8%
Inadequate housing	124	9.2%
Loss of control during discipline	113	8.3%
New baby in home/pregnancy	110	8.1%

CAN and Substance Use

Estimates of the number of families where SUD is a factor in the family's involvement with CWS range from 5-90% — a range so wide that it does not provide meaningful information.[37] An analysis examining reports, studies, and articles discussing prevalence estimates for parental SUD in child welfare systems concluded that existing data is inconsistent, outdated, and unreliable.[37] Additional recent research indicates that many factors affect whether a parent with SUD will abuse or neglect a child, including the type of substance used, the gender of the parent with SUD, the parent's mental health status, the parent's cognitive abilities, and more.[38] An important factor in understanding prevalence is the type of CWS intervention with a family, because the rates of parental SUD vary widely between families receiving in-home services, families with a child in foster care, or families who are reported and not confirmed.

Parental SUD is tracked more exactly when infants are involved. States are required to report data about Infants with Prenatal Substance Exposure (IPSE). IPSE includes children who are ages birth to one year, referred to CWS by medical personnel, and "born with and identified as being affected by substance abuse or withdrawal symptoms."[34] In FFY 2020, among the 49 states that reported, 42,821 infants were referred to CWS for IPSE[34(Table 7-5)]. As with other CAN data, not all states reported on all risk factors.[34(Table 7-5)] In Hawai'i in FY2018, parental substance use was a precipitating factor for 78% of infants who were placed into foster care.[39] In state fiscal year (SFY) 2019, for Hawai'i CAN reports (hotline calls) that received a CWS or differential response, 47% indicated that substance

use was a reason for the call.[40] Among children who spent any time in foster care in SFY2019, 56% had parental substance abuse indicated as either a factor precipitating incident or as a circumstance of removal.[40]

CAN and IPV

The third National Survey of Children's Exposure to Violence (NatSCEV III),[41] conducted in 2013-14, found that over their lifetimes, 19.5% of children aged zero to 17 witnessed a family assault and 15.8% witnessed one parent assault another parent or their partner. Among youth aged 14 to 17, the lifetime rate of witnessing any family assault was 32% and for witnessing adult assault of a partner, it was 25%. Family assault includes parental assault of a sibling and violence between teens and adults in the household. When looking at exposure to IPV in the year preceding the survey, approximately 5.8% of children had been exposed to some form of assault between their parents or a parent and an intimate partner.[41]

For children who are alleged victims of CAN, the exposure to family violence is greater than among other children. In Hawai'i, the screening process for calls to the CWS CAN hotline in Hawai'i includes questions about problem areas related to CAN and circumstance that prompted the call (recorded as precipitating factors). In SFY 2019, at least 26% of CAN hotline calls referred for a CWS investigation had DV indicated as a problem area.[40] One or more problem areas were listed in 55% of the referred cases; the presence of DV or other problem areas in the other 45% of cases is unknown.[40] Of the hotline calls referred for CWS investigation, at least 13% had DV listed as a factor precipitating the incident prompting the call.[40] One or more precipitating factor was listed for 89% of the referred cases; the role of DV in the other 11% of cases is unknown.[40]

Researchers have consistently estimated that the co-occurrence of IPV and CAN is between 30% and 60%, and approximately 60% of CAN cases also include IPV.[4,42] Researchers have established a clear link between CAN and other forms of intrafamilial violence. When substances are added into the equation, the potential for harm increases because the use of substances by a perpetrator increases the likelihood of and the seriousness of an incident. Furthermore, substance use by the protective parent decreases that parent's ability to protect the children from violence.[Reed, 1991, as cited in][30]

While IPV occurs between adults, children in the household are also victimized by exposure to the IPV or its impact. The physical, emotional, and developmental impact of children's exposure to IPV is similar to what is seen in children who are CAN victims.[9] Additionally, CAN often co-occurs with IPV, so children in families where there is IPV are at greater risk for neglect or abuse, and many of them suffer from both exposure to IPV and CAN.

Financial Impact

The societal and individual costs of CAN and IPV are staggering. They include medical expenses, mental health care, pain and suffering, special education services, loss of productivity in education and work, property damage, direct expenses such as moving and changing phone numbers, child welfare and legal system expenses, and criminal

justice system costs. A 2015 analysis by the CDC found that the individual lifetime costs for a victim of nonfatal CAN range from $210,012 to $830,928, and the costs of a CAN fatality range from $1.3 to $16.6 million.[43] For IPV victims, in 2017, the CDC calculated the lifetime cost of nonfatal IPV to be $103,767 for women and $23,414 for men.[44]

The CDC has also calculated the societal economic burden of CAN and IPV. Using the value of the U.S. dollar in 2015, the estimated annual costs to society of substantiated CAN cases is $428 billion, which represents the lifetime costs incurred annually.[43] The equivalent annual economic burden for IPV, as calculated in 2017, is $594 billion.[44] The studies estimating financial costs have many limitations. For example, the per-person costs are per victim, not incident, so victims who experience multiple incidents of violence are expected to have higher lifetime costs. Despite the limitations, the economic analysis of IPV and CAN shows that these preventable injuries are extremely costly to individuals and society.

Lifetime Health Consequences

Children who are victims of CAN, exposed to IPV, or have a parent with SUD are likely to suffer lifelong health consequences unless they have positive supports or experiences that mitigate the negative impact of these traumatic events. Physical abuse, verbal abuse, sexual abuse, physical neglect, emotional neglect, having a mother who was a victim of IPV, having parents who were separated or divorced, and living with someone with SUD are all individual Adverse Childhood Experiences (ACEs).

The identification of ACEs, and the health implications of experiencing ACEs were revealed in a 1998 study by Kaiser Permanente and the CDC.[11] The study explored the relationship between 10 types of adversity experienced in childhood and health outcomes in adulthood. The findings showed that without protective factors to buffer children from the impacts of ACEs, the presence of ACEs significantly increases the risk of disease and a lower life expectancy. For example, a person with 4 or more ACEs has a significantly increased risk for 7 out of 10 leading adult causes of death, including heart disease, stroke, cancer, chronic obstructive pulmonary disease, diabetes, Alzheimer's, and suicide, and a person with 6 or more ACEs has a life expectancy that is 20 years shorter than a person with no ACEs.[45]

Extensive research has revealed a consistent relationship between CAN and a variety of physical and psychological disorders ranging from depression and suicide to diabetes, gastrointestinal disorders, and heart disease.[46] Similar findings exist for IPV victims.[47] Individuals who experience acts of intrafamilial aggression and violence have a higher risk of experiencing negative outcomes in every domain of their life, including physical and emotional health, education and employment, economic stability, and interpersonal relationships.[48] They are also at a higher risk of engaging in risky and unhealthy behaviors like smoking, using drugs and alcohol, and having multiple sex partners without protecting themselves against sexually transmitted infections.

Two of the most troubling consequences of CAN and IPV are the increased risk of being a victim or perpetrator of future abuse and the increased risk of SUD.[3,17] The next section

further discusses the risk factors and why they do not have to be predictive—the presence of protective factors can mitigate the risks.

Risk and Protective Factors

Risk and protective factors are conditions that increase or reduce the likelihood of certain outcomes. For public health problems, risk and protective factors are often explored within the context of a social-ecological model, which provides a framework for understanding the factors on several levels: societal, community, relationship, and individual. Understanding how factors at each of these levels influence physical, mental, and behavioral health provides useful information about the potential impacts of prevention and intervention strategies.[49]

Risk factors increase the likelihood of undesirable or negative actions and outcomes, while protective factors serve as buffers against risk factors. Risk factors are associated with and contribute to the likelihood of a particular outcome, but they might not be direct causes. The presence of protective factors in families and communities increases the health and well-being of children and families.[50] In the context of child well-being and child abuse prevention, protective factors are supports in a community or characteristics of a parent that allow or help parents to maintain social connections, develop resiliency, gain parenting skills and knowledge, seek or receive concrete supports in time of need, and foster the social and emotional competence of their children.[51] Applying the social-ecological model to IPV and CAN, one sees the following risk and protective factors.

Perhaps the most influential societal factor is the pervasive acceptance of verbal, emotional, financial, sexual, and physical abuse of women and children. In the United States, this is furthered by a widespread embrace of negative masculine norms that value violence and aggression.[52] Additionally, U.S. mainstream culture embraces historical (and false) ideals of autonomy, independence, and self-sufficiency, which leads to shame and stigma associated with seeking help and participating in social services.[53] Other societal factors include a lack of adequate resources to support parents and promote safe and nurturing families and healthy relationships. Yet another societal factor is racism. Discrimination against and marginalization of people of color and Indigenous people at all levels of society increases their risk factors and decreases their ability to access supports or strengthen their protective factors.

Societal protective factors include such things as universal CAN and DV prevention programs and services; equitable access to supports for families, including meeting families' basic needs such as food, housing, transportation, and physical and mental health care; and safe communities with adequate and culturally responsive resources including employment, education, and recreation opportunities.

Societal and community factors that can be either risk or protective factors, depending on the presence or lack thereof, include policy and funding decisions, and the availability, accessibility and effectiveness of societal institutions and supportive services. A community's beliefs and attitudes toward neighbors, schools, places of worship, health care, law enforcement, SUD treatment providers, government, and social service agencies

play a large role in increasing risk or protective factors. If these entities are seen positively and as a source of support, protective factors tend to increase; if they are seen as "the enemy," risk factors tend to increase. Even the types of businesses and the condition of buildings and streets serve as protective or risk factors. For example, communities with a higher density of alcohol outlets appear to be associated with higher rates of IPV.[54]

The community and relationship levels of the social-ecological model provide the context in which IPV, CAN, and SUD occur. At these levels, social isolation or connectedness, economic health of the community, median income levels, employment opportunities, and access to transportation, adequate housing, and other basic resources all act as risk or protective factors that can balance each other out or tip the scales toward negative or positive outcomes.

Community and family norms around gender roles, conflict resolution, communication styles, substance use, violence, parenting, and interpersonal relationships are substantial influences on individual's behavior. Community, family, and individual values around such things as self-reliance versus collective support, help-seeking as a strength or weakness, shame or protection around vulnerability or victimization, and cultural and religious or spiritual beliefs and practices all influence behavior and can serve as risk or protective factors.

Within families, the level of adult involvement in a child's life serves as a risk or protective factor. Generally speaking, the more supervision and monitoring provided by adults, the less likely youth are to engage in risky behaviors or to become IPV victims as teens. For adults, intimate partners and other adults in the household are a strong influence. For adolescents, the values and activities of peers can be equal to or greater than the influence of family members.

At the individual level, personality, biology, and personal history influence the likelihood of using substances and being a perpetrator or victim of violence. Other individual factors include socioeconomic status, zip code and census tract, age, race, ethnicity, spiritual beliefs, attitudes, education, and employment. The likelihood of becoming a perpetrator or victim of IPV and CAN is also related to whether a person is involved in an intimate relationship and the quality and status of that relationship, and whether a person is a parent and whether pregnancies were planned. Finally, the level of knowledge and skills a person has to engage in nonviolent communication, healthy relationships, and safe and nurturing parenting have a bearing on the likelihood of being a perpetrator or victim of intrafamilial violence. Relationship, community, and societal factors greatly influence individual factors, and all levels must be considered together. For example, due to relationship, community, and societal factors, many individuals never have an opportunity to experience or learn nonviolent communication skills or nurturing parenting skills.

Other risk factors to consider, particularly for Hawai'i, are the impact of generational and historical trauma at all levels of the social-ecological model, and systemic racism. Clinician and researcher Maria Yellow Horse Brave Heart describes historical trauma as the "cumulative emotional and psychological wounding over the lifespan and across

generations, emanating from massive group trauma experience."[55] While there is not universal acceptance among researchers and clinicians about the impact of historical trauma and whether and how it might be transmitted through generations, it is irrefutable that Indigenous communities have higher rates of IPV, CAN, and SUD than any other ethnic or cultural group. Many experts attribute this to historical trauma caused by colonization; destruction of cultural, social, and political customs and systems; and the forceful overthrow of Indigenous leadership. The growing field of epigenetics explores how genes are expressed and how epigenetic changes can be caused by historical trauma as well as current trauma such as systemic racism, CAN, IPV, and SUD. Epigenetics is being explored as a way to understand why child maltreatment can have such devastating lifelong and multi-generational impacts on physical and mental health.[46] Finally, persistent and deep-rooted systemic racism and oppression impact all levels of the social-ecological model: societal, community, relationship, and individual. The cumulative effects of these risk factors are particularly visible in the disproportionate levels of victimization from CAN, IPV, and other forms of violence experienced by people of Native Hawaiian, American Indian, and Alaska Native descent.

Unfortunately, risk factors can have a compounding effect for IPV, CAN, and SUD.[56] For example, conflict within the family increases the risks of CAN, IPV, sexual violence, and teen dating violence, and survivors of one form of violence are at greater risk of victimization from other forms of violence.[56] They are also at greater risk of SUD. Most people who are victims of violence do not become perpetrators of violence; however, exposure to violence or being a victim increases the likelihood that a person will behave violently.[56] The use of drugs and alcohol by either partner in a relationship increases the risk of IPV and CAN.[30] Most people who are victims of violence do not become perpetrators of violence; however, exposure to violence or being a victim increases the likelihood that a person will behave violently.[56] Children whose parents have SUD or are IPV victims have a greater likelihood of becoming victims and/or perpetrators of IPV and CAN. Furthermore, being a victim of CAN or IPV as a child or adolescent increases the risk of using substances at an early age.

As stated earlier, protective factors serve as a buffer against risk factors. And the benefits of protective factors are also cumulative—the existence of multiple protective factors lowers the risk of negative outcomes from existing risk factors.

Current System of Care in Hawai'i

In Hawai'i, as in most places, substance use, IPV, and CAN are typically addressed as three separate and unrelated concerns, each handled through a different system. Each system has its own entryway, focus, priorities, and goals. Funding for each system is tied to the focus and goals, which are usually heavy on intervention and treatment and light on prevention. In reality, SUD, IPV, and CAN are often interrelated problems, and an integrated system of care is more effective than a siloed approach. Experts in each field agree that failing to address the co-occurring problems is likely to render treatment of any of the problems ineffective or incomplete.[30]

For IPV victims trying to access supports and services, what they encounter is not really a "system." Instead, IPV victims seeking help encounter a fragmented approach to service delivery that is difficult to navigate and often re-traumatizes those it is designed to serve. Services are provided by community-based agencies, usually funded through contracts with state agencies. Victims and their advocates interact with other systems such as family court, the criminal justice system, and the child welfare system, none of which is designed with a focus on supporting or meeting the needs of IPV victims.

Child welfare systems, court systems, and other social services systems are set up to address the presenting problem bringing a person into contact with that system, and the system response is largely dictated by that presenting problem. However, appropriately triaging the problems and sequencing the responses can pose a significant challenge for service providers, particularly when the presenting problems are interconnected and nearly inseparable.

A siloed system is unable to appropriately respond to the complex interrelationship of intrafamilial violence and SUD. While there is a clearly established correlation between SUD and family violence, cause and effect are not clear. For example, researchers and clinicians do not know if perpetrators use drugs and alcohol to numb feelings or to reduce inhibitions, if using causes them to become violent, or if there are other correlations between substance use and committing IPV. They also do not know if victims are forced or coerced into using substances; use substances to numb their pain, disconnect from past and current victimization, or self-medicate for untreated mental health conditions; or if using substances increases their risk of victimization because they are less able to protect themselves. All of these circumstances have been found among perpetrators and victims of IPV who also use alcohol or other drugs.[24,25] What is known is that addressing SUD and IPV concurrently increases the chances of positive outcomes in both areas.[30]

What follows is a description of the three overlapping systems most often encountered by family members when SUD and IPV and/or CAN are present. Each description begins with a statement of how families enter the system and a summary overview of the system structure, followed by more details about Hawai'i programs, supports, and services specific to the intersection of IPV, CAN, and SUD.

Substance Use Disorder Services

People seeking help with SUD can access services ("enter the system") by calling the statewide Coordinated Access Resource Entry System (CARES) line, getting a physician referral for a SUD screening, or by contacting a local SUD treatment provider. When family violence is involved, most victims and perpetrators arrive at SUD treatment through a referral from another system such as Family Court or CWS.

Overview

The Hawai'i State DOH Alcohol and Drug Abuse Division (ADAD) has the statutory authority to create, coordinate, regulate, and fund a statewide substance abuse services system,(HRS §321-193)[57] with services delivered by private agencies with ADAD contracts operating under the CARES. CARES provides or authorizes a range of services for ADAD-funded clients, including screening, intake, assessment, care coordination, and referral

and placement determinations resulting in linkages to appropriate services and resources."[58] SUD treatment services may be provided through private insurance companies or treatment providers who accept direct payment from clients (out-of-pocket or private pay). Entry into the SUD system may be voluntary or ordered by a family court, criminal court, or specialty drug court. Court referrals are more likely when SUD is a factor in IPV and/or CAN because addressing the SUD may be required for the perpetrator or parents to be released from court oversight.

Hawai'i Interventions

Within the Hawai'i SUD system exist some interventions that provide gender-specific treatment, specifically address IPV, and/or work with pregnant women and mothers with young children. Some of these providers have productive working relationships with other systems such as the courts, CWS, and DV. Most SUD treatment providers say they provide holistic and trauma-informed services, and many provide services based in Native Hawaiian cultural practices. The list below provides a sampling of such programs and interventions available in Hawai'i in the spring of 2022. Programs, staffing, funding sources, and contracts shift on an ongoing basis, so any program listing represents a point in time.

- **Women's Way**, a program of the Salvation Army Family Treatment Services on O'ahu, Malama Family Recovery Center on Maui, a program of Maui Behavioral Health Resources, and the Big Island Substance Abuse Council Moms and Babies Program are the three places in Hawai'i where women can participate in residential treatment and have their babies or young children with them. These programs provide a continuum of comprehensive gender-responsive and trauma-informed services to women and their children, include a focus on recovery from and prevention of IPV, and offer services based in Native Hawaiian cultural practices and values. They provide classes and coaching in parenting, life skills, healthy relationships, and dealing with trauma. Many women in these programs are involved with CWS and are working to be reunited with children who are in foster care or to prevent their children from being placed into foster care.
- In February 2022, the **PATH Clinic of Waikiki Health**, which is located on the campus of Salvation Army Family Treatment Services, began a pilot program in which a Parent Partner is available to work with pregnant women experiencing SUD. The Parent Partner is a parent who is in recovery and has successfully navigated the child welfare system.
- **Lokahi Treatment Centers** on the Big Island addresses both SUD and IPV, working separately with perpetrators and victims. This provider is not part of the CARES Network.
- **Family Drug Court**, a treatment court that is available on some islands, provides a comprehensive approach to helping parents break the cycle of addiction and CAN through monitored service delivery that includes SUD treatment and parent education.[59]
- While not specifically addressing SUD, **Hawai'i Girls Court** provides services and supports for female adolescents and their families, and the services may include referrals and support for SUD treatment as well as supports for recovery from and/or prevention of IPV and CAN.
- **EPIC 'Ohana** provides a service called **Family Wrap Hawai'i**, which is a family-led and family-centered interagency team process to support families that are involved

with CWS. The teams often include a Parent Partner and a Youth Partner. These are people who have successfully navigated social services systems such as CWS, Family Court, or SUD treatment and who continue to be successful in their recovery and are willing to mentor and support other system-involved people. Wraparound services and peer partners are both considered promising practices in the world of evidence-based practices (EBPs), and both are recommended for people involved with multiple systems and/or who are struggling with addiction, trauma, and violence.

Intimate Partner Violence

IPV victims connect with services in different ways, including through a 911 call, a DV hotline, a health care provider, an employer, Family Court, or a DV shelter. IPV victims may also be referred to services after their children are referred to CWS.

Overview

Hawai'i does not have a "system of care" for IPV. While victims can access a network of services, there is not a single entry point or a centralized referral system for IPV services. Most direct services are delivered by community-based nonprofit organizations and funded through state and county contracts, many of which use federal funding. Some services are funded by foundation grants and discretionary federal grants (non-formula). A variety of services and supports are available to people affected by IPV, and survivors are usually involved with multiple systems, such as the courts, mental health, and medical. The lack of coordination is aptly captured in this sentence introducing an octopus-like flow chart of the Hawai'i system of care for IPV survivors: "The process we help guide survivors through is daunting and complex."[21] The chart identifies the system entry point as a call to 911, and the chart includes a process flow for multiple pathways: advocacy and civil court (orders for protection), criminal justice, civil family court (divorce, paternity, and custody), housing, and CWS. The chart does not include the mental health or SUD treatment systems, a telling indicator of the separation between systems, despite their interconnectedness.[21]

Hawai'i services for IPV victims and survivors include legal advocacy, emergency shelter, housing, counseling and support, safety planning, meeting the immediate and long-term health and safety needs of victims, and education and outreach. Many IPV providers refer clients to other services to meet needs such as employment assistance, life skills training, parenting support, mental health treatment, or SUD treatment.

Three state agencies provide most of the funding and oversight for DV services: DHS, DOH, and the Department of the Attorney General (AG). The Judiciary also funds some DV programs and services. The paragraphs below include examples of how these funds are used.

Each island has at least one organization contracted by DHS to provide DV services for survivors, perpetrators, and children. Such services include counseling and support, crisis and emergency intervention services, case management, safety planning, support and education groups, batterers intervention programs, limited therapeutic or clinical counseling, and other supports.[60] In addition, each county has at least one DHS-

contracted provider of shelter and transitional housing services. Each shelter must operate a 24-hour hotline, provide transportation to the shelter, provide services to residents, and provide transitional housing if available. DHS contracts with the Legal Aid Society of Hawai‘i to provide legal and advocacy services to survivors in or eligible to stay in DV shelters, including immigrant survivors of DV. DHS also contracts with the Domestic Violence Action Center (DVAC) to provide statewide supportive services to teens, including outreach and education about healthy relationships and direct services for victims of dating violence.

Across the state, DVAC provides direct services and long-term advocacy for survivors, including legal services, crisis support, safety planning, support groups, specialized advocacy to meet the needs of specific communities, supportive programming for survivors, and more. DVAC operates a statewide legal hotline with 24/7 text and chat capability. Survivors of IPV who have active cases with prosecuting attorneys' offices may receive support, referrals, or services through the Victim Witness Assistance Programs attached to those offices.

The DOH Family Health Services Division Maternal and Child Health Branch is the state agency tasked with DV prevention, and as such, provides support for the DV Fatality Review, conducts trainings and outreach, and works with community partners to implement system changes. DOH also promotes and supports IPV screenings by family planning and medical professionals. Within DOH, prevention funding and programming for CAN, DV, and sexual violence are collectively known as The Family Strengthening & Violence Prevention Unit. DOH staff and community partners provide programs statewide, including support for parents and education targeted for teens to prevent sexual violence. The DV Fatality Review is a multidisciplinary and multi-agency review of domestic violence-related homicides, suicides, and near-deaths to reduce the incidence of preventable intimate partner deaths.[61] The fatality review process analyzes systems' responses to DV with input from community agencies and other related organizations, identifies barriers and gaps, provides a forum to discuss coordination, strengthens collaborations, and promotes and supports coordinated community response efforts.[62]
The AG administers federal grants and state funds for DV and sexual assault prevention and intervention services, including the Hawai‘i Sexual Assault Response and Training (HSART) Program, the STOP (Services, Training, Officers, Prosecutors) Violence Against Women grant, and the Victims of Crime Act grant. These federal funds support law enforcement, courts, and nonprofit organizations in providing services and supports for victims of IPV and sexual violence and in prosecuting offenders.

The Judiciary funds programs delivered by community organizations on O‘ahu.[63] Programs include Developing Options to Violence, a program providing specialized DV intervention services; advocacy and support for victims involved with Family court and criminal domestic violence matters; case management; DV hotline services; safe settings for supervised visits between parents and children; and a variety of counseling, advocacy, and intervention services for adult and juvenile perpetrators of IPV and abuse of family members. The Judiciary also operates a Girls Court on O‘ahu which includes prevention, education, and advocacy related to DV.

Hawai'i Interventions

Many of the programs and services for survivors of IPV are described in the overview section just above. As with substance abuse treatment programs, programs for families experiencing IPV change regularly because of shifts in staffing, funding, contracts, and community needs. Table 8, below, presents a snapshot of some of the primary providers of programs related to IPV.

Table 8. Examples of IPV Services in Hawai'i, 2022

Organization	Program Name	Services for Victims/ Survivors (services for entire family are included here)	Services for Children/ Youth	Services for Offenders	Other	Funding Sources (if known; not comprehensive)	Geographic Area Served
Ala Kuola	Temporary Restraining Order (TRO) Services	Family Court TRO Services				Judiciary	O'ahu
	Coaching Boys INTO MEN		National violence prevention program for athletic coaches to educate young male athletes.			DOH, Department of Education private funders	O'ahu
Child & Family Service	Domestic Violence Services for Families	Assessments, crisis management, safety planning, case management, counseling and support, visitation services, resource linkage, advocacy, TRO support, parenting and life skills education				DHS	Leeward O'ahu, Kaua'i, West Hawai'i Island, East Hawai'i Island, Molokai
	Developing Options to Violence	Counseling for adult survivors	Counseling for children/youth who are victims or witnesses to DV	DV intervention services for adult and youth perpetrators of DV or abuse of a household member		Judiciary	O'ahu
	Emergency Shelter	Shelter, advocacy, supportive services				DHS	O'ahu. Hawai'i Island
DOH	Nā Leo Kāne				Community initiative focused on expanding the conversation of what it means to be a man in Hawai'i: meetings, public education, support, healthy relationships, and DV prevention activities	DOH (CDC funding), DVSA special fund	Statewide

Organization	Program Name	Services for Victims/ Survivors (services for entire family are included here)	Services for Children/ Youth	Services for Offenders	Other	Funding Sources (if known; not comprehensive)	Geographic Area Served
DVAC	Survivor Advocacy Services; Pulama I ka Ohana; Alakaʻi Advocacy Program	Safety planning; legal representation; access to medical care and housing; referrals to other services; crisis intervention; counseling; system navigation; other supports.				Annual Report includes these sources of funding: • Foundations and Grants: 16% • Community Support: 8% • City and County of Honolulu: 15% • State of Hawaiʻi: 36% (AG, DOH, DHS, Judiciary) • Federal: 24% (Administration for Children and Families; DOJ Office on Violence Against Women)	Oʻahu
	Teen Alert (TAP808)		Outreach, prevention and education				Statewide
	Teen Violence Intervention services		Hotline, assessment, linkage to services, case management, advocacy, counseling for teen victims of DV and their families				Oʻahu
	Pulama I ka Ohana		Support groups, legal advocacy, mental health services for children and non-offending survivor parent				Oʻahu
		Hotline, housing supports					Statewide
	Hoʻoikaika ʻOhana	9-month program for Native Hawaiian survivors and their children, using traditional practices for healing.					Oʻahu
	Domestic Violence Action Ready: A Program for Hawaiʻi's Companies				Trainings for supervisors, human resources personnel, and employees		Statewide

Organization	Program Name	Services for Victims/ Survivors (services for entire family are included here)	Services for Children/ Youth	Services for Offenders	Other	Funding Sources (if known; not comprehensive)	Geographic Area Served
Legal Aid Society of Hawai'i		Legal advocacy services for survivors of DV who are in or eligible to stay in DHS-administered DV crisis shelters				DHS	Hawai'i Island, Kaua'i, Lanai, Maui, Molokai
		Legal advocate for immigrant survivors of DV					Statewide
Molokai Community Services Council	Hale Ho'omalu	Safe Shelter for victims of DV and their children, TRO assistance				DHS	Molokai
	Alternatives to Violence		Education, anger management, non-violent coping skills-building	Intervention services for perpetrators			Molokai
Parents and Children Together	Family Peace Centers	Victim advocacy, supports, parenting skill-building.	Victim advocacy, supports, skill-building; anger control and violence intervention education and skill-building.	DV intervention (including specifically for adults with SUD); anger control and violence intervention education and skill-building.		DHS, Judiciary, discretionary federal, U.S Department of Housing and Urban Development	Central and Windward O'ahu, Maui, Lanai
	Ohia DV Shelter	Shelter, hotline, wraparound services for survivors and their children.				DHS	O'ahu, with priority for Windward coast
	Lehua Transition House	Housing for women without children for 12 months				DHS	O'ahu
	Hale Ola Transition House	Housing for survivors and their children for 6-25 months and comprehensive support services				DHS	O'ahu

Organization	Program Name	Services for Victims/ Survivors (services for entire family are included here)	Services for Children/ Youth	Services for Offenders	Other	Funding Sources (if known; not comprehensive)	Geographic Area Served
	Family Visitation Centers		Neutral site for children to visit with non-custodial parent or for transition of children between parents.			Judiciary, Federal funding	Oʻahu, Kauaʻi
	Trafficking Victims Assistance Program		For youth victims and their families or caregivers: case management and other services in partnership with other providers.			DHS	Statewide
University of Hawaiʻi	PAU (Prevention, Awareness & Understanding) Violence Program	Sexual and dating violence prevention, education, and victims' services.				DOH	Oʻahu
Women Helping Women		TRO and court assistance/support, case management, employment and education help, financial assistance, housing and rental assistance, health-related services, linkages to services, transportation	Support groups for children and youth who have experienced DV and teen victims of DV			DHS and other sources	Maui County
		Emergency shelter and hotline				DHS	Maui and Lanai
YWCA Kauaʻi		Crisis Intervention, Counseling, TRO assistance and court support, Support groups, emergency assistance, linkages to services	Children's services and support group			DHS	Kauaʻi
		Family Violence Shelter, hotline, and supportive services				DHS	

In addition to the services listed in the table above, two organizations provide statewide advocacy, education, and convening of stakeholders: the Hawai'i State Coalition Against Domestic Violence (HSCADV) and the Domestic Violence Action Center (DVAC). HSCADV is a membership organization of organizations and individuals working to eliminate all forms of DV in Hawai'i. They help build the capacity of their members, provide public education, host an annual conference, raise awareness about DV, and engage in public policy development with state agencies and the legislature. DVAC provides direct services, public education, training, and engages in system change work.

Child Abuse and Neglect

Families usually enter the CWS system through a call to the statewide centralized CWS intake line. About 70% of callers are mandated reporters—people who are legally required to report CAN, such as police officers, social workers, medical providers, and teachers. The remaining callers are family members, friends, neighbors, and community members.[35] The call to intake starts a process that is guided by state law and CWS policies and procedures. If a family receives services that are tracked by CWS (with or without a confirmed CAN case), that family is considered "CWS-involved."

Overview

An intake call is either screened out (no indications of CAN) or screened in (referred for further assessment by CWS or a community agency). Screening tools guide the decision-making process. Families that CWS determines have a low or moderate risk and no identified safety issues are referred to voluntary services provided by contracted community providers. This referral can be made by CWS intake or by a CWS caseworker after receiving the referral from intake and completing a further assessment.

If the report is referred to CWS, CWS conducts a more detailed assessment of the circumstances and determines whether CWS should take any further action, which could include referring the family to voluntary services in the community, offering the family voluntary CWS services, or obtaining a court order for mandatory services.

If CWS and/or a judge determine that children cannot safely remain at home, CWS will remove them from their home and place them with relatives or in foster homes. If that occurs, parents have about a year to resolve the problems that brought the child into CWS care. By statute, if a child has been in foster care for 15 of the most recent 22 months, CWS is required to file a motion to terminate the parents' rights to the child.(HRS § 587A-27)[64] This timeline is mandated by a federal law created to prevent children from staying in foster care indefinitely, and instead provide an option for children to be placed in a permanent home through legal guardianship or adoption after allowing a reasonable time for reunification efforts to be successful.(Public Law 105-89)[65]

Once a family is involved with CWS, the family is also involved with other systems such as the family court system, the IPV system, the mental health system, and the SUD treatment system. When CWS identifies multiple concerns, such as SUD and CAN, services are provided through systems that are financially and structurally distinct, and families can be overwhelmed with the number of people and agencies with whom they must interact.

Each family has a Family Service Plan that identifies the problems that brought the child into the CWS system and the steps the parents must take to exit the system. "These specific steps shall include treatment and services that will be provided, actions completed, specific measurable and behavioral changes that must be achieved, and responsibilities assumed..."(HRS § 587A-27)[64] The CWS caseworker is ultimately responsible for helping parents stay on track to complete their Family Service Plans. Unfortunately, for several years, CWS has struggled with finding and retaining qualified staff for stressful jobs in a state with low unemployment and high costs of living. Caseloads are higher than national recommendations, in part because for several years, about 20% of caseworker positions have remained unfilled. Therefore, caseworkers have less time to spend with each family on their caseloads. Sometimes this gap is filled by community providers, parents' attorneys, and children's guardians ad litem, all of whom play a significant role in helping families progress through the system. When available, parent partners, advocates for survivors of DV, home visitors, system navigators, and SUD treatment coaches all help parents maneuver through systems and complete services and tasks to regain or retain custody of their children.

Hawai'i Interventions

A variety of interventions are available to CWS-involved families, depending on needs indicated by risk and safety assessments, parents' desire for services, reasons the family was referred to CWS, and availability and accessibility of programs. Hawai'i has a Differential Response System with three pathways for families:

- Reports assessed as **low risk and with no identified safety issues** are referred to Family Strengthening Services (FSS). CWS contracts with community agencies to provide FSS, which is a voluntary service offered to families. If families choose not to participate, their FSS "case" is closed.
- Reports assessed as **moderate risk with no identified safety issues** are referred to Voluntary Case Management (VCM). CWS contracts with community agencies to provide VCM, which is a voluntary service offered to families. If families choose not to participate, their VCM "case" is closed, and if the VCM agency believes further interventions are needed to keep children safe, the case may be referred back to CWS for additional assessment and decision-making.
- Reports assessed as **severe or high risk and/or with identified safety issues** are assigned to a CWS unit for investigation.

Services provided through FSS and VCM might include case management, home visiting, emotional support, parent coaching, and skill-building in parenting, emotional regulation, problem-solving, and life/household management.

Families with high risk or safety issues have a CWS caseworker and a Family Service Plan. Services might be provided to keep children safe in the home, either with or without a court order, or children might be placed with relatives or in foster care, with court involvement.

Families that meet specific criteria may be referred to specialized interventions. For example, The Family Court of the First Circuit offers O'ahu Girls Court, Zero to Three Court, and Family Drug Court, all of which serve families involved with CWS. Girls Court usually works with girls in the juvenile justice system, but many of them also have current or past CWS involvement or are in the juvenile justice system because of SUD and/or violence in the family.

Starting in 2021, CWS began providing Family First Hawai'i (FFH) services to CWS-involved families that meet the FFH criteria. FFH is the Hawai'i implementation of the federal law, Family First Prevention Services Act (FFPSA),[66] which allows Title IV-E funds to be used for evidence-based prevention services to prevent the placement of children in foster care. The prevention services must be in the areas of SUD treatment, parenting programs, and mental health services. FFPSA also allows these funds to be used to support legal representation of parents and children. Finally, FFPSA allows IV-E funds to be spent on "foster care maintenance payments" for children placed with their parents in a licensed residential family-based treatment facility for substance abuse. This means that instead of IV-E funds paying for a child to be placed in foster care while the parent is in a residential treatment facility, in some cases, if the licensed facility meets all requirements and it is in the best interests of the child, those funds could be paid to the facility where the child is placed with the parent during treatment. Hawai'i currently does not use IV-E funds for legal representation or placement of children with parents in residential SUD treatment, and FFH does not include any SUD treatment services. However, Hawai'i can change this in the future, which means there may be unrealized opportunities to creatively address the intersection of SUD and CAN.

Observations & Recommendations

This section provides recommendations for increasing the likelihood of positive outcomes for Hawai'i families affected by intrafamilial violence and substance abuse. Because SUD, IPV, and CAN are interrelated and co-occurring concerns, positive outcomes for children and adults are more likely when a coordinated system exists that views, diagnoses, and treats co-occurring CAN, IPV, and SUD as one "problem" with a constellation of connected symptoms, similar to the way that doctors treat complex illnesses.

Overarching observations

CAN, IPV, and SUD have devastating personal, societal, and economic costs that can affect generations of people. Prevention is the most efficient way to lower these costs—research shows that the human and economic returns on investing in prevention far outweigh the expense. Furthermore, when intervention and treatment are needed, a coordinated, holistic approach yields the best outcomes. However, coordination *across* systems is complicated by the need to improve cohesiveness and coordination *within* each system, particularly for victims of IPV. For them, a statewide coordinated system does not exist, which complicates efforts of the other systems to implement coordinated broad-based improvements.

This section provides some observations about how IPV and CAN are currently addressed when they co-exist with SUD, and changes that are likely to lead to a collaborative model of service delivery and improved outcomes for families and children.

Gaps in Existing Services and Systems

The gaps described in this section pose the biggest barriers to developing a collaborative system. Addressing these gaps does not guarantee that a collaborative model will be created or successful; however, not addressing them increases the likelihood that coordination and collaboration will not improve.

Lack of Accurate Data

Hawai'i professionals in the field do not have enough accurate information to make informed decisions about which changes are most likely to cause the fastest and biggest improvements. This is true within individual systems and across systems. For example, accurate data is not available about the number of IPV victims in Hawai'i, the number of victims who have children, victim demographics, or details about the IPV incidents, including whether alcohol or other drugs played a role. And accurate data is not available about how long it takes people to access and then engage in SUD treatment services and what the outcomes of those treatment services are. Such information is critical because the research literature is clear that appropriate responses to situations involving two or three of IPV, CAN, and SUD need to be tailored to the circumstances.

Table 9 provides an example of information that would inform the selection and implementation of appropriate interventions for CWS-involved parents with SUD. The children of these parents are especially vulnerable to long-term negative outcomes—they spend more time in foster care and have a lower chance of reunification than children in foster care for other reasons.[67] Less than 25% of CWS-involved mothers with SUD successfully complete treatment,[68] primarily because these mothers have more complex needs than other mothers with SUD.[69] Therefore, tailoring interventions to the needs found among these parents should improve outcomes for their children.

Table 9. Information needed to inform selection and implementation of appropriate interventions for CWS-involved parents with SUD

Information Needed	Purpose
Number of mothers, fathers, other caregivers with SUD (each category listed separately)	Understand the demand for SUD treatment services among parents and caregivers
Disaggregated data about children whose parents have SUD including children's ages, which caregiver has SUD, and children's ages at foster care entries and exits	Determine needs related to parents keeping children with them during residential treatment and understanding which ages are most impacted by SUD
Types of SUD treatment CWS-involved parents were referred to and/or participated in (inpatient, outpatient, etc.)	Understand the demand for and utilization of SUD treatment services
Referral pathway from CWS identifying SUD to parents participating in treatment, including timeframes, types of services parents are referred to, frequency of drug screens, other supports provided	Identify what is and is not working in the current process; identify where recovery coaches or peer partners could fit into the process; better understand demand for SUD treatment and time frames for completion; better understand other supports offered to families; identify strengths, needs and gaps
Number of CWS-involved families who participate in Family Drug Court, the referral pathway, and the short- and long-term outcomes for those families	Understand how families currently access Family Drug Court services and where barriers exist; understand the effectiveness of Family Drug Court to improve the process and outcomes; identify gaps such as aftercare supports
Available slots, locations, and eligibility requirements for comprehensive, holistic treatment that addresses SUD and parenting	Understand the supply of specialized SUD treatment services and educate courts and CWS about appropriate services
Number of CWS-involved parents who complete treatment; number of parents who maintain sobriety over time; outcomes of their CWS cases	Understand treatment retention and completion rates; understand the effectiveness of treatment; look for connections between treatment and CWS case outcomes; identify gaps such as housing, financial support and aftercare supports

Lack of Knowledge

The people working in these areas in Hawai'i are extremely dedicated, and they excel in their areas of expertise. However, while they have at least a working knowledge of interrelated issues, an expert in one of these three areas is unlikely to have deep expertise in other areas such that they would understand the causes and consequences of SUD *and* CAN *and* DV, as well as what it takes to address these difficult situations. Many professionals may not even know the level of interconnectedness among these issues and the implications of those connections. Furthermore, professionals in one system usually do not have experience with the inner workings of other systems, so they lack in-depth knowledge about how the other systems operate, particularly the constraints of other systems. These gaps in understanding perpetuate the existence of parallel rather than coordinated systems.

System Constraints

Successful system improvement efforts account for existing and future constraints on systems by addressing them or working within their confines. Identifying such constraints is important to understanding the scope, viability, and potential timelines of system improvement options.

Staff Vacancies and Turnover

Maintaining a stable and capable workforce is essential to the proper delivery of services. When agencies are understaffed, individual workers are overburdened and have less time for each client they serve. Turnover reduces the amount of knowledge within an agency, which can impact referrals to services. For example, a DOH assessment about SUD treatment for pregnant and parenting women with children found that CWS workers were not making referrals to Zero to Three Court or Family Drug Court because regular turnover led to caseworkers not knowing about the specialty courts or their benefits for families.[70]

For CWS, vacancies and turnover have been a persistent problem. From 2017–2020, the vacancy rate across the agency ranged from 17% to 24%.[20] In May 2020, 22% of caseworker positions were vacant, and 14% of line supervisor positions were vacant. Turnover is also a constraint. In May 2020, 18% of the workforce had been with CWS for a year or less, and 21% had been with the agency two to four years. Nationally, for the last 15 years, annual turnover rates in child welfare agencies ae estimated to be from 20% to 40%, with a range from 6% to 65%. Turnover rates below 10-12% annually are desirable for a well-functioning agency.[71]

Across all systems, the pandemic further reduced the social services workforce. Many employees who were close to retirement chose early retirement, and many women left the workforce and have not returned. The social services sector workforce is predominantly female, so the effects of the pandemic were felt especially hard in this sector.

Time Frames for Services

The amount of time "allowed" for an agency to provide services to a family is often decided by statutory time frames, contract requirements, and funding limitations. For example, if a child is placed into foster care, parents generally have about a year to meet all the requirements in a family service plan so the child can be returned home.(HRS § 587A-27)[64] CWS caseworkers and the court must work within these statutory timelines or Hawai'i will lose federal funding for the child welfare system. SUD providers must work within limits imposed by insurance or other funding sources that cap the amount of time a person can spend in residential or outpatient treatment for SUD. Ancillary, supportive services such as temporary housing and emergency funding are also usually time limited. These timelines are often unrealistic for parents struggling to recover from SUD and IPV because recovering from SUD and healing from trauma does not occur according to a pre-defined timeline.

Information Sharing

Having accurate data to make informed decisions requires collaboration and information-sharing. Each system, though, has its own terminology, process for collecting and

interpreting data, and process for connecting clients to services. Information is not routinely shared among providers, across systems, or with funders and the public, and a central automated referral system across systems and providers does not exist. Each system follows federal and state laws and rules regarding the confidentiality of information. These laws dictate what information can or must be shared under what circumstances and in what formats. Confidentiality can always be waived by a client if the waiver is made knowingly and voluntarily. Many states, including Hawai'i, use multi-agency consent forms that allow agencies to share information with a client's permission when a client is served by multiple organization.

Collaboration across systems and providers occurs in Hawai'i, but it is restricted by gaps in knowledge about other systems and, although it is rarely discussed openly, a lack of trust. Many providers in each system feel like other systems are "against" their clients. Within and across systems exist philosophical differences (such as harm reduction versus abstinence) and power imbalances. Sometimes systems inadvertently revictimize clients being served in other systems, which furthers mistrust. Providers easily see where there are conflicting priorities among their agency and others; with more information about the interconnectedness of IPV, CAN, and SUD, they may more clearly see where their priorities are aligned.

Funding Mechanisms

Funding for services comes with many requirements and restrictions. This can make it difficult for providers, especially SUD treatment programs, to design individualized treatment plans that account for recovery from trauma, IPV, and CAN. Medical billing systems may not include billing codes for holistic treatment or for ancillary services that are essential to support successful SUD treatment. DOH- and DHS-funded programs often have client eligibility requirements, and their contracted providers may only provide services allowed within the scope of their contracts. Such constraints within the system are likely to hamper collaborative efforts across systems, and more importantly, prevent clients from receiving the comprehensive care they need.[72]

Unaddressed barriers to meeting clients' needs

Because of restrictions in funding and contracts, providers and systems usually cannot provide creative or individualized solutions to meet clients' needs. They are also slow to adapt to changes in community or client circumstances. Even just linking a client with other services can be frustrating and time-consuming because easy mechanisms to accomplish that do not exist. Other barriers related to linking a client to services include failing to identify a client's needs. Oftentimes, if providers are not looking for an issue, they will not find it. Systems and programs may not screen for things they cannot address, such as homelessness, mental illness, SUD, CAN, or IPV. And specialized services for clients with complex needs are not readily available in Hawai'i. While it can be frustrating to identify needs that cannot be easily met (and unidentified needs can affect funding and outcome measures), limiting assessments to only those things that a specific program addresses is contrary to a holistic, trauma-informed approach.

Recommendations for Improvements

Improve System Operations and Coordination

Building a cohesive system of care for families affected by intrafamilial violence that co-occurs with substance use is a long-term endeavor, but taking steps toward a collaborative model of service delivery can begin today. Leaders at DHS, DOH, CWS, ADAD, courts, law enforcement, within the community of advocates and service providers for DV survivors, and within the community of housing advocates and providers, can begin to design a continuum of services that will break cycles of violence and addiction.

Each of the steps listed below requires more explanation than is within the scope of this chapter. For brevity, key activities are listed that will move Hawai'i forward. Technical assistance guides are available from a variety of federal agencies and national resource centers including the CDC, Substance Abuse and Mental Health Services (SAHMSA), the National Center on Substance Abuse and Child Welfare, and Futures Without Violence. They provide details for implementing each of the steps to create a collaborative model of service delivery.

1. Acknowledge the interrelatedness of IPV, CAN, and SUD, and agree on the need to address them holistically.

- Establish a high-level public-private leadership team or working group to develop a coordinated continuum of care, address funding concerns, and resolve problems.
- Provide widespread education about the interrelatedness of IPV, CAN, and SUD.

2. Build relationships and improve communication and coordination among providers, agencies, and systems.

- Activities might include the following:
    - Develop a shared vocabulary and use consistent terms across data sets.
    - Appoint liaisons in each agency who are subject-matter experts tasked with improving understanding and coordination.
    - Expand cross-training among professionals from all involved agencies and systems.
    - Have people who work in one agency or topic area shadow people in another agency. For example, a DV counselor might spend a few days on the job with a CWS worker, and a CWS worker might spend a few days with a SUD treatment provider.
    - Convene regular multi-agency case staffings for shared clients.

3. Identify and address barriers in values, beliefs, and objectives that prevent trust and collaboration. Identify and focus on areas where there are shared goals such as strengthening the health and safety of parents and children.

4. Identify and address racial and ethnic inequities and disparities embedded in agencies and systems.

- Agree on and use common terminology and data points.
    - Collect and use common data.
    - Utilize process and outcome data for continuous quality improvement (CQI).
    - Create and utilize a mechanism for reporting non-confidential and de-identified data publicly.

5. Design a collaborative model of service delivery.

- Use the expertise of people with lived experience, epidemiologists, and data scientists in system development and implementation.
- Work toward universal identification of co-existing problems through screening and assessments.
- Design, fund, and evaluate specialized, integrated services.
- Create a process for information-sharing at client, agency, and system levels and ensure that providers understand that federal and state laws and regulations allow for broad information-sharing with proper, voluntary consents.
- Modernize technology and data systems and invest in technology that allows data-sharing, coordination of services, and seamless referrals to other programs and supports.
- Map service delivery systems from the perspective of clients. Identify and reduce barriers to accessing and successfully participating in services.
- Identify ways that health care systems' focus on improving social determinants of health (SDOH) can be used to facilitate the development of a continuum of care for families affected by violence and substance use, particularly for families insured through Medicaid.

6. Develop a coordinated community response that includes public education and works to promote community norms that reject violence and promote help-seeking.

Fund Systems, Services, and Supports

Adequate, dedicated, long-term funding is required to holistically address the intersection of IPV, CAN, and substance use. Listed below are some strategies for the leadership team or committee tasked with designing a coordinated system. These strategies can also be implemented within existing siloed services and systems.

1. Understand the rules for funding streams and utilize creativity and flexibility in allocating funds.
2. Take advantage of all possible federal funding and allocate adequate state matching funds to maximize federal funding.
3. When allowable by law, place children with their parents in family-focused residential SUD treatment programs instead of placing the children in foster care, and offset the costs with federal Social Security Act Title IV Part E (Title IV-E) funds.[73]
4. Use Title IV-E funds to support legal representation for parents and children involved in child welfare proceedings. Such legal representation can include a team approach utilizing lawyers, peer partners, social workers, investigators, and paralegals.(45 CFR 1356.60(c), section 474(a)(3))[74]
5. Ensure all needed billing codes for services available to victims of DV or CAN and people with SUD exist for all insurers in Hawai'i, especially Med-QUEST. Suggest new Current Procedural Terminology codes as needed to ensure the provision of holistic, specialized services. Identify ways that health care systems' focus on improving SDOH can help fund needed services and supports.
6. Create braided and blended funding streams for programs and services and study models utilized elsewhere to understand how to do this successfully.

7. Revise procurement processes to encourage collaboration and require meaningful data collection and monitoring of outcomes to inform a productive CQI process. Provide appropriate compensation for these activities.

Implement Prevention Strategies

"Prevention is so much better than healing because it saves the labor of being sick."[Thomas Adams] Decades of research confirm the wisdom of this maxim and quantify the benefits of investing in prevention. CAN, IPV, and SUD prevention efforts in Hawai'i are fragmented and poorly funded, much like the systems that intervene when problems are not prevented. To truly address IPV, CAN, and SUD, a robust long-term prevention approach is required. As explained earlier, people experience risk and protective factors at societal, community, relationship, and individual levels. Therefore, prevention should occur at all levels and should be directed at everyone, not just those deemed "most at risk." Prevention Science is a distinct field of work, and this brief section cannot attempt to provide a comprehensive description of the strategies needed at every level of the social-ecological model. Instead, it provides a list of suggestions that can start Hawai'i along an improved path of prevention.

1. Improve the coordination and funding of CAN, IPV, and SUD prevention strategies and activities.

2. Create a sustained framework for prevention that aims to increase the presence of protective factors and improve SDOH.

3. Set a statewide goal of providing equitable access to high-quality, effective, universal prevention services for CAN, IPV, and SUD, such as family strengthening and home visiting programs, and education and support around creating healthy relationships and engaging in nonviolent communication and conflict resolution.

4. Increase ease of access by creating a unified, automated intake and referral process for all family support programs and services.

5. Provide incentives and pathways for state and private agencies to implement a whole-family no-wrong-door process for accessing services.

5. Ensure universal, equitable access to high-quality mental and physical health services to reduce risk factors for IPV, CAN, and SUD.

6. Implement age appropriate and on-going school- and community-based curriculums to teach children and teens skills in non-violent communication, conflict resolution, problem-solving, positive personal relationships, anti-bullying, health, parenting, household management, and personal finance.

7. Increase the presence and use of system navigators who help families address needs related to SDOH, particularly navigators that provide peer support for parents and youth.

Improve Client Experience and Success

Individually and collectively, service providers and systems can take action to increase the likelihood that people with SUD and victims of family violence will engage in and successfully complete services.

1. Ensure services are trauma-informed, culturally responsive, and easily accessible. "Accessibility" includes multiple factors, including the location of physical offices, availability of public transportation and childcare, hours of operation, languages spoken, the availability of translators, eligibility requirements, attendance requirements, and whether virtual access is an option.

2. Implement universal screening and a "no-wrong-door" approach to serving clients.

3. Ensure that workers in private and state organizations are well-supported, fairly compensated, have opportunities and funding for professional development, and have manageable workloads.

4. Increase the use of peer supports and parent partners to improve client engagement and successful service completion.

5. Provide additional incentives and supports to increase the number of providers who have lived experience and/or are representative (culturally, ethnically, linguistically) of the clients they serve.

6. Adequately fund a continuum of services from outreach and client engagement to post-service supports.

7. Ensure rapid access to high-quality crisis services such as supports for victims of DV and sexual assault and supports for houseless families.

8. Design, fund, and evaluate specialized, integrated services.

- Expand existing residential treatment models that allow mothers to bring their children to live with them while they participate in family-friendly residential SUD treatment.
- Create similar residential treatment models for fathers.
- Expand gender-specific SUD treatment options and ensure that all women have access to same-gender treatment if that is their preference.
- Integrate treatment and support for IPV victims and their children into SUD treatment programs.
- Integrate interventions for IPV offenders into SUD treatment programs.
- Continue or reinstate funding for Family Court Drug Courts if evaluations of the outcomes support the efficacy of Hawai'i Drug Courts.

Invest in Evaluation and Research

For many years, funding of human services has been shifting toward EBP. Each field of work has its own clearinghouse that explains and rates the evidence base for programs and interventions. While this practice is grounded in good intentions and a need to show a return on investments, it has some drawbacks. First, implementing EBP often requires a significant up-front and continuing financial and staff investment in training, certification, program accreditation, and fidelity monitoring. Because provider contracts are not guaranteed and do not cover the full costs of providing services, it can be hard for providers to justify the expense of starting a new EBP. Second, many effective programs cannot be rated because the level of evidence required to be rated by a clearinghouse is unattainable. For example, the evidence base usually must include publication of multiple studies in peer-reviewed journals. This means that programs that have not been scaled to multiple sites and small programs designed for a particular cultural or ethnic group cannot be included because there are no comparison programs. Small programs are also not included because there is unlikely to be staff or budget for building the evidence to support a rating. State contracts for services do not include funds for research and

evaluation. These barriers are particularly relevant for Hawai‘i, where providers see positive results from culturally-based and ‘āina-based locally developed programs but cannot meet the level of evidence required to access funding designated for EBP. Finally, some EBP just do not translate to Hawaiian culture, and modifying the EBP to make it more accessible to the local population is usually seen as not maintaining fidelity to the model, which results in a loss of funding.

Consequently, the legislature and state agencies should do the following.

1. Provide funding and expertise for evaluation of locally developed programs and services.

2. Advocate for greater flexibility with programming dollars so that programs that demonstrate positive outcomes but do not meet nationally recognized EBP standards can be adequately funded.

3. Provide start-up funding to contractors so they can provide EBP.

4. Encourage creative collaborations so that if contracts end, the EBP knowledge, certifications, and accreditations can continue.

5. Choose EBP that allow providers to adapt the model to meet the needs of local populations.

Conclusion

Given the high level of co-occurrence of SUD, IPV, and CAN in some combination, and the poor outcomes for families and children when these are treated as unrelated concerns, it is time for Hawai‘i to try a new, integrated, cohesive approach to helping families struggling with SUD and intrafamilial violence. The research is clear that collaborative models of service delivery yield better results. Frameworks, roadmaps, and funding opportunities exist to implement a collaborative approach. What is needed next is a commitment by a Hawai‘i entity to lead the effort.

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Implications for a System of Care in Hawai‘i for Pregnant and Parenting Women and Substance Use

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Abstract

Substance use disorder (SUD) in pregnancy negatively affects families and communities, and they are a priority population for substance use treatment. In Hawai‘i, pregnant women and women with dependent children (PWWDC) are a high-needs population that merit prioritization for treatment given the significant, multi-generational impacts of SUD. As the leading state agency, the Hawai‘i State Department of Health, Alcohol and Drug Abuse Division (ADAD) has myriad opportunities to enhance services and supports available to PWWDC in Hawai‘i in collaboration with a diverse network of partners and stakeholders. Four key, evidence-based recommendations are presented here, along with specific action items to consider under each: 1) Funding for gender-specific/responsive treatment, including children; 2) Improved care coordination and resource/referral infrastructure; 3) Sustainable and reimbursable peer support programs, elevating voices of lived experience; and 4) Workforce capacity and development. Through advocacy, funding, and engagement with ongoing initiatives, ADAD can help provide more Hawai‘i families with appropriate and accessible gender-specific/responsive treatment and care during pregnancy, postpartum, and beyond.

Background & Introduction

Substance Use and Pregnancy

Substance use disorder (SUD) is associated with myriad adverse outcomes, such as physical and mental health problems and exposure to violence. For people who become pregnant, both legal (smoking, alcohol) and illicit (methamphetamines, cocaine, opioids) substances negatively impact the fetus/infant as well.[1] Complications associated with SUD during pregnancy vary based on the substance(s) used, and can include placental abruption, preterm birth, low birthweight, birth defects, neurodevelopmental disorders, fetal alcohol spectrum disorder (FASD), neonatal abstinence syndrome (NAS), neonatal opioid withdrawal syndrome (NOWS), and sudden infant death syndrome (SIDS).[1,2] Developmental and psychosocial effects associated with SUD during pregnancy can persist to adolescence and adulthood, with increased risks of cognitive and behavioral challenges, executive functioning and attention deficits, mood and anxiety disorders, psychotic disorders, personality disorders, eating disorders, and SUD.[3-5]

Women are at increased risk of developing SUD during their reproductive years (18-44 years old), and the risk is highest between 18-29 years old.[3] Individuals with SUD during pregnancy may face multiple barriers to accessing care, including transportation, caring for existing children, food and housing insecurities, medical and psychiatric comorbidities, and overall lack of resources.[3] Furthermore, 90% of pregnancies among women with SUD were unintended, compared to 45% in the overall United States (U.S.) population, leading to late pregnancy confirmation, delayed prenatal care, and prolonged prenatal substance exposure and impact on fetal development.[6] Further exacerbating the issue of substance use among **pregnant women and women with dependent children (PWWDC)**, also referred to as **pregnant and parenting women (PPW)**, is the insufficient availability of programs and services employing evidence-based practices tailored towards their unique needs, which tend to be more complex and costly. PWWDC are often stigmatized and ostracized for their substance use, leading to further legal, emotional, and financial consequences.

National and Hawai‘i Prevalence

The National Survey on Drug Use and Health (NSDUH) estimates that past month substance use rates for pregnant women in the U.S. range from 0.2% for cocaine to 9.6% for tobacco products and 9.5% for alcohol (see Table 1).[7,8] Due to small sample sizes, NSDUH estimates for pregnant people in Hawai‘i are not very precise (i.e., they have wide confidence intervals), which complicates comparison to the national sample. For example, NSDUH data from 2015-2018 estimate that 15.6% of pregnant people in Hawai‘i were currently using alcohol, but the true proportion (with 95% confidence) may be anywhere between 5.0% and 39.6%.[9] NSDUH 2015-2018 estimates of current tobacco and marijuana use among pregnant people in Hawai‘i were 12.8% and 2.1%, respectively, with similarly wide confidence intervals (see Table 1).[9]

Table 1. Past Month/Current Substance Use among Pregnant Women from 15 to 44 y/o in the United States (2019) and Hawai'i (2015-2018). Adapted from 2019 National Survey on Drug Use and Health: Women. Substance Abuse and Mental Health Services Administration (SAMHSA).[88]

	United States, 2019*		Hawai'i, 2015-2018*
Type of Substance	**Estimated N**	%	**% (95% CI)**
Tobacco Products**	198,000	9.6%	12.8% (5.2-28.2)
Alcohol	197,000	9.5%	15.6% (5.0-39.6)
Illicit Drugs	120,000	5.8%	--
Marijuana	112,000	5.4%	2.1% (0.6-6.7)
Opioids	8,000	0.4%	--
Cocaine	3,000	0.2%	--

*15-44 years old for United States (2019) estimates, 12-44 years old for Hawai'i (2015-2018) estimates
**Tobacco products include cigarettes, smokeless tobacco, cigars, and pipe tobacco.

The Pregnancy Risk Assessment Monitoring System (PRAMS) is another important source of data about substance use during pregnancy at the national and state levels. This population-based survey of women who have recently had a live birth uses a stratified random sampling method, and results are weighted to represent the population. PRAMS has asked different questions about substance use during pregnancy across different survey years; data provided in Table 2 reflect the most recent 3 years of data available for each substance use question. Based on the most recent data available, about 6% of postpartum women in Hawai'i report using illicit drugs before pregnancy, and 3% report using illicit drugs during pregnancy. More than half of women report drinking alcohol prior to pregnancy, while 8% report drinking in the last 3 months of pregnancy. For cigarette smoking, these estimates are 13.5% and 5.1%, respectively.

Table 2. Prevalence of Substance Use Prior to and During Pregnancy, from Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS)[10]

	2009		2010		2011		2009-2011	
	N*	**% (95% CI)**	**N**	**% (95% CI)**	**N**	**% (95% CI)**	**N**	**% (95% CI)**
Used illicit drugs while pregnant**	500	3.0 (2.1-4.2)	400	2.5 (1.7-3.7)	600	3.4 (2.5-4.6)	1,600	3.0 (2.5-3.6)
	2013		2014		2015		2013-2015	
	N	**% (95% CI)**	**N**	**% (95% CI)**	**N**	**% (95% CI)**	**N**	**% (95% CI)**
Used illicit drugs in month before pregnancy	1,300	7.4 (5.8-9.5)	900	5.3 (4.0-7.0)	900	5.4 (4.0-7.4)	3,100	6.1 (5.2-7.1)
	2015		2016		2019#		2015, 2016, 2019#	
	N	**% (95% CI)**	**N**	**% (95% CI)**	**N**	**% (95% CI)**	**N**	**% (95% CI)**
Drank alcohol in last 3 months of pregnancy	1,500	8.7 (6.8-11.0)	1,400	7.8 (5.8-10.5)		6.8 (4.5-10.2)		8.0 (6.7-9.5)
Drank alcohol in 3 months before pregnancy	9,500	54.5 (50.7-58.3)	9,400	54.3 (50.0-58.5)		50.3 (44.6-56.0)		53.6 (51.0-56.2)
Smoked cigarettes in last 3 months of pregnancy	900	4.9 (3.5-6.7)	900	4.9 (3.3-7.3)		5.8 (3.4-9.7)		5.1 (4.0-6.4)
Smoked cigarettes in 3 months before pregnancy	2,100	12.0 (9.8-14.5)	2,600	14.7 (11.8-18.0)		14.3 (10.5-15.4)		13.5 (11.8-15.4)

* Estimated count (i.e., number of pregnancies affected), rounded to nearest 100
**Amphetamines (uppers, ice, speed, crystal, crank) - Cocaine (rock, coke, crack) or heroin (smack, horse) - Marijuana (pot, bud) or hashish (hash) – Sniffing gasoline, glue, hairspray, or other aerosols - Tranquilizers (downers, ludes) or hallucinogens (LSD/acid, PCP/angel dust, ecstasy)
The 2019 PRAMS dataset is smaller than previous years

There has been a reported five-fold increase in opioid use during pregnancy between 2000 and 2009.[3] The rate of opioid use disorder (OUD) diagnoses among women during labor and delivery from 30 states has more than quadrupled over a 15-year period ending in 2014, increasing from 1.5 to 6.5 per 1,000 deliveries.[11] In 2015, a study done by the Center for Behavioral Health Statistics Quality found that 1.38 million reproductive-age (15–44 years old) women used a stimulant in past month (misuse of stimulant prescriptions 1.0%; cocaine 0.7%; methamphetamine 0.7%; ecstasy 0.3%).[12] In the U.S., the number of pregnant women who have reported using stimulants correlates with this finding. It has also been found that there is co-occurring alcohol use with pregnant women who have also reported having used unprescribed opioids prior to and after becoming pregnant.[13] However, most of the PWWDC being treated in Hawai'i report a primary substance of methamphetamines, not opiates.

PWWDC: Risk Factors and Health Disparities

Pregnant women with SUD are a vulnerable group as they not only experience the consequences of substance use, but also other factors that contribute to and exacerbate it. Women with SUD often experience other challenges such as inadequate prenatal care, poor nutrition, chronic medical problems, poverty, domestic violence, dysfunctional maternal-infant relationships, and comorbid psychiatric issues.[14] Understanding the health disparities among PWWDC is necessary to provide services where they are needed. Through an analysis of PRAMS data, Delafield and Wright found that pregnant women in Hawai'i who were more likely to use illicit substances were under the age of 25, did not have a high school diploma or equivalent, and identified as being of Native Hawaiian or African American ethnicity.[1] Pregnant women with SUD are disproportionately represented among women of lower socioeconomic status and women of color.[15] This disproportionate representation often leads to further financial, legal, and emotional consequences on the women.

Comorbid Mental Health Conditions

Pregnant women with SUD are associated with psychiatric morbidity. Pregnancy is also a period of time when a woman may experience increasing symptomology of current mental illness, as well as onset of new mental health symptomology.[16] Among these psychiatric comorbidities, anxiety, depression, and post-traumatic stress disorder (PTSD) have been found to be the most common.[17,18] Research done by Arnaudo et al[17] has found that rates of mood and anxiety-related disorders increase during pregnancy, but for pregnant women with SUD the rate increase is more significant. Also, pregnant women with SUD may suffer from multiple psychiatric and mental health disorders at one time. Further research done by Arnaudo et al[17] has revealed that 44% of pregnant women with SUD also had a mood-related disorder and a co-occurring anxiety disorder, and in cases where pregnant women with SUD had PTSD they were twice as likely to have a comorbid personality-related disorder. In some instances, comorbid psychiatric disorders and mental illnesses are often left untreated or unrecognized within pregnant women. If left untreated, they can result in adverse health outcomes on the fetus and the worsening of the mental and physical health of the mother, as well as the inability to seek or receive sufficient prenatal care. In addition, if left untreated it further exacerbates substance use/dependency throughout all stages of the pregnancy. Women seeking prenatal care with a physician should receive a screening for alcohol and substance use as well as a mental health screening due to the higher likelihood of a co-occurring disorder. Likewise, pregnant women seeking and receiving substance use assessment

and treatment would benefit from further mental health assessment and intervention due to the high likelihood of this comorbidity.

Relationship Violence

Due to the increase of hospital visits because of prenatal care and other pregnancy-related health concerns, it allows an opportunity to screen and assess pregnant women for other adverse factors, such as intimate partner violence (IPV) or domestic violence (DV), which may impact the health and well-being of themselves and their fetus before, during, and after the pregnancy. O'Doherty et al defines[19] IPV, also known as DV in some sectors, as any behavior within an intimate relationship that causes physical, sexual, and psychological harm to those involved in the relationship. There has been estimates that about 3-19% of pregnant women experiences some form of IPV during their lifetime, with about 3-15% of women experiencing physical abuse and about 17-25% experiencing emotional abuse during pregnancy.[20] Further research done by McDonald et al[21] found that the prevalence level of IPV during pregnancy ranged from 0.9-30% for physical abuse, 1.0-3.9% for sexual abuse, and 1.5-36% for emotional abuse. Numerous factors increase women's risk of IPV and DV, such as young age, poor mental health, urban residency, low income, single status or non-cohabitation with the partner, and lower levels of education. IPV and DV have also been shown to be associated with higher rates of pregnancy at a younger age. [19] Especially during pregnancy, IPV and DV leads to an increase in miscarriage and abortions, premature births, prenatal death, other adverse birth outcomes, such as low birth weight, as well as an increase in the onset of depression-related symptomology and unlikelihood or postponement of seeking adequate prenatal care.[22] Pregnant women who experience IPV and DV and additional risk factors such as anxiety, post-traumatic stress disorder, low self-esteem, and increase in weight gain can lead to the onset or increase in risky behaviors, such as substance use. The additional screening of pregnant women in prenatal care can act as a protective factor against IPV and DV and its associated consequences. Continued exposure to IPV and DV can be a risk factor for pregnant women to begin or continue the use of substances as a coping mechanism, before, during, and after their pregnancy, as well as a variety of comorbid conditions, such as psychological and physical health-related problems.

Trauma and Adverse Childhood Experiences

A history of trauma and trauma-related events, especially incidents of physical and sexual abuse in childhood, has been shown to be a strong predicator for drug and alcohol abuse in women.[23] Further research done by McDonald et al[21] has revealed that childhood trauma is associated with adverse and risky behaviors and life choices in adulthood, such as excessive substance use and suicidal tendencies, the development of diseases, and being victim to sexual violence as an adult. Childhood trauma has also been linked to IPV in later life.[24] Likewise, there is also a link between childhood trauma and an increase in the likelihood of developing some form of mental and psychiatric disorders in later life. Childhood trauma, IPV, and mental and psychiatric disorders in tandem contribute to the development of substance use disorders and other adverse health outcomes, especially with more susceptible populations, such as pregnant and parenting women. Unresolved childhood trauma can extend into adulthood and impact a parent's ability to provide a healthy attachment experience for her own children which places the children's mental health at risk, furthering the intergenerational cycle of violence and substance use. An increase in screening for women during primary care physician visits throughout the lifetime or when initiating prenatal care can identify possible childhood trauma and provide appropriate trauma-informed care.

Access to Care - Rural/Underserved Populations

When providing care-related services to various populations, individuals and communities that reside in rural settings are met with additional barriers that hinder access and engagement in care services. This inability to access the appropriate care providers is detrimental to rural PPW population, as studies have revealed increased rates of illicit substance use during pregnancy and less likelihood of engaging in substance use treatment services.[25] Research done by Dworkin et al identifies multiple barriers rural PPW populations face at various levels; individual level, local-setting level, and broader sociocultural level.[25] Furthermore in rural populations, these barriers become more apparent for PPW who are of lower socioeconomic status and women of color.[26] At the individual level, rural PPW tend to place a lower prioritization on engaging in care-related treatment and focus instead on the time demanding responsibilities of balancing work and family expectations. At the individual level, transportation and lack of available child care options also impedes the chances of seeking or engaging in care services. Within the local-setting level there is a lack of access to care providers who are well equipped and competent to address the needs of rural PPW. Further, when there are available service providers, there is a lack of screening for SUD and other adverse ailments, which allows SUD and other adverse ailments to continue unnoticed and unchecked. At the larger sociocultural level, the culture and beliefs of the rural community can influence PPW's decision making capabilities in relation to access and engagement of appropriate care-related services, increase in punitive responses and biases towards PPW for substance use during pregnancy, and lack financial stability to access, engage, and continue care services, such as the inability to work when the child is born and the lack of affordable housing situations. Within rural PPW communities, the inability to access appropriate care services and treatment is a risk factor, as the various barriers that impede access only further exacerbates the onset and continued use of substances throughout all stages of the pregnancy.

Pregnancy as a window of opportunity for intervention and treatment

During pregnancy, women become highly motivated to reduce or cease their substance use, because of the desire to protect and care for their fetus. Pregnant women who seek prenatal care have frequent encounters with health care professionals, which allows for more frequent assessment and screening for substance use and related conditions. This distinct period of time also allows for further access to extended medical care. However, while pregnant women acknowledge that they must stop substance use during pregnancy, many are unwilling or unable to make the change.[27] Further, majority of pregnant women need some form of intervention in order to fully stop substance use. Among these interventions are brief interventions (BI); screening, brief intervention, and referral to treatment (SBIRT); motivational interviewing; incentive-based programs; cognitive behavioral therapy (CBT); health education; social support; intense behavioral treatments; and pharmacotherapies.[27,29] The mother-fetus dyad can then be assessed for SUD and being substance exposed, respectively, which will lead to identifying an appropriate level of care and allow the access to treatment and social service intervention. Other possible factors that impact whether or not a pregnant woman will seek treatment is fear of losing custody of her children, the expectations and structure of treatment, her readiness to stop using, the encouragement from her partner and the seeking of housing.[15] Due to the significant consequences of substance exposure and use for both the mother and fetus, as well as the proven efficacy of early intervention, pregnant women should be prioritized for treatment.

For prevention, a recent study found that serial early prenatal substance use screening resulted in significant decreases in prenatal substance use compared to third trimester screening.[30] Prenatal and general SBIRT in women's health and primary care settings would help to identify women with/at risk of SUD during pregnancy.

Current System of Care in Hawai'i

As a primary source of SUD treatment/prevention funds for the State, the Hawai'i State Department of Health, Alcohol and Drug Abuse Division (ADAD) manages the Substance Abuse Treatment Block Grant (SABG), which prioritizes the population of **pregnant women and women with dependent children (PWWDC)** across the continuum of care. Federal regulation 45 CFR § 96.131 requires that SABG-funded programs and services comply with the State to provide any pregnant woman who is seeking or is referred to services be given preference when being admitted into treatment facilities and other related services. It also requires that the State disseminate information and make known that these SABG services are available and that preference will be given to pregnant women seeking services. Furthermore, if treatment providers are unable to accommodate pregnant women, they must then be referred to the State, which is responsible for a continuum of services that ensures an appropriate treatment provider placement.

Data from the Web Infrastructure for Treatment Services (WITS), the data system used by ADAD, suggest that PWWDC constituted approximately 1-3% of admissions and discharges from ADAD-funded treatment providers in 2019-2020.[31,32] [31,32] Table 3 lists the ADAD-contracted treatment providers that offer specialized treatment for PWWDC on five islands, as of 2022-2024. Service types are limited by geographic location (e.g., residential treatment only available on O'ahu), which sometimes precludes clients from engaging in the treatment most appropriate and feasible for them.

Table 3. ADAD-Contracted Treatment Providers of "Specialized Substance Use Treatment for Pregnant Women and Women with Dependent Children (PWWDC)," 2022-2024. (Updated May 12, 2022).[33]

Agency	Island	Services
Big Island Substance Abuse Council (BISAC)	Hawai'i	Day Treatment, Intensive Outpatient, Outpatient, Continuing Care, Clean & Sober Housing (Mom & Child), Therapeutic Living Program (Mom & Child), Child Care (PWWDC)
Child and Family Service	Kaua'i	Outpatient, Continuing Care, Child Care
Ka Hale Pomaika'i	Moloka'i	Intensive Outpatient, Outpatient, Continuing Care, Clean & Sober Housing
Malama Na Makua A Keiki dba Malama Family Recovery Center	Maui	Intensive Outpatient, Outpatient, Continuing Care, Clean & Sober Housing (Mom & Child), Therapeutic Living Program (Mom & Child), Child Care
Salvation Army Family Treatment Services	O'ahu	Residential (PWWDC), Therapeutic Living Program (PWWDC), Day Treatment, Intensive Outpatient, Outpatient, Continuing Care, Clean & Sober Housing (PWWDC)

Data from WITS indicate that the vast majority (95-99%) of PWWDC served across ADAD-funded treatment providers in 2019-2020 were served at Salvation Army Family Treatment Services (SAFTS, on O'ahu), Malama Family Recovery Center (MFRC, on Maui), and Big Island Substance Abuse Council (BISAC).[34] Limited PWWDC demographic and clinical information available from these providers are

shown in Table 4. This snapshot of clients served may not reflect the entire PWWDC population in Hawai'i, as women who choose to - or are able to - receive SUD treatment at these sites may differ in meaningful ways from women who receive treatment elsewhere or who do not receive treatment at all.

Table 4. Characteristics of PWWDC clients from primary ADAD-funded treatment providers, n (%)

	SAFTS (ALL ADMISSIONS FY2021, N=110)	MFRC (ALL ADMISSIONS, FY2021, N=60)	BISAC (PWWDC ADMISSIONS 2017-2022, N=171)
Primary Substance			
Methamphetamine	88 (80%)	38 (63%)	128 (75%)
Alcohol	13 (12%)	4 (7%)	15 (9%)
Heroin/Opiates/Non-Prescription Methadone	6 (5%)	9 (15%)	17 (10%)
Cannabis/Marijuana	0 (0%)	9 (15%)	11 (6%)
Crack/Cocaine	2 (2%)	0 (0%)	0 (0%)
Other	1 (1%)	0 (0%)	0 (0%)
Age (years)			
<18	0 (0%)	0 (0%)	0 (0%)
18-24	13 (12%)	4 (7%)	28 (16%)
25-29	25 (23%)	19 (32%)	57 (33%)
30-39	45 (41%)	29 (48%)	70 (41%)
40-49	22 (20%)	6 (10%)	16 (9%)
50-59	4 (4%)	2 (3%)	0 (0%)
>=60	1 (1%)	0 (0%)	0 (0%)
Ethnicity			
Native Hawaiian	56 (51%)	32 (53%)	
Caucasian	27 (25%)	20 (33%)	
Asian (Filipino, Japanese, Korean, Vietnamese)	12 (11%)	2 (3%)	
American Indian	3 (3%)	2 (3%)	
Pacific Islander	7 (6%)	1 (2%)	
Black	2 (2%)	1 (2%)	
Other	3 (3%)	2 (3%)	
Living Situation			
Independent Living	15 (14%)	24 (40%)	
Transitional/Temporary	7 (6%)	0 (0%)	
Unknown	2 (2%)	4 (7%)	
Homeless	57 (52%)	19 (32%)	
Incarcerated/Furlough	21 (19%)	2 (3%)	
Dependent	8 (7%)	11 (18%)	
Referral Type			
SUD provider	11 (10%)	4 (7%)	
Child Welfare Services (CWS)	9 (8%)	12 (20%)	
Criminal Justice	27 (25%)	5 (8%)	
Individual/Self-referral	48 (44%)	33 (55%)	
Other provider	6 (5%)	3 (5%)	
Health care provider	9 (8%)	2 (3%)	
	SAFTS and MFRC (Oct 2017-Feb 2022, n=212)		**BISAC (PWWDC admissions 2017-2022, n=171)**
Education			
12th grade completed/high school diploma/equivalent	92 (43%)		124 (73%)
Mental Health			
Co-occurring SUD and mental illness	139 (66%)		136 (80%)

Criminal Justice Involvement (at intake)		
On probation or parole	72 (34%)	62 (36%)
Pretrial	24 (11%)	Not avail.
PPW Status (at intake)		
Pregnant	54 (25%)	29 (17%)
Entered with children	195 (92%)	42 (25%)
Child Welfare Services Involvement		
Involved with CWS (at intake)	105 (50%)	102 (60%)

Pregnancy provides an opportunity for homeless women to engage in care for their complex needs and to more readily trust in providers at this stage.[35] External motivators like probation/parole officers and CWS involvement also help in increasing interest in treatment or at least following through with recommendations from these sources. Thus, issues relevant to many PWWDC seeking treatment for SUD include those discussed in other chapters of this plan, including Mental Health, Homelessness, Criminal Justice, and Native Hawaiian.

PWWDC often access treatment in Hawai‘i through the direct referral sources (e.g., self-referral, criminal justice, CWS). The SUD treatment providers that frequently serve PWWDC are well-known within the community, and thus referrals are made directly to them. It is unknown how many treatment referrals for PWWDC have been made successfully through Hawai‘i CARES, as these data are not available. PWWDC tend to require more intensive case management support in addition to the referral process available with CARES. The Hawai‘i CARES Intake Form includes questions on the number and ages of children living with the applicant and if the individual is pregnant. The intake form and assessment process otherwise does not differ for PWWDC compared to other clients. Hawai‘i CARES and all ADAD-contracted treatment providers must abide by the following policy: “If a treatment program does not have the capacity to immediately admit a pregnant woman to treatment, or if placement in the program is not appropriate, the program must refer the woman to Hawai‘i CARES in order to coordinate BH SUD COC services at an appropriate and available service provider in the BH COC network.” In addition, “While Hawai‘i CARES is linking the client to other services, the program must: Provide interim services within 48 hours;” including “Counseling on the effects of alcohol and drug use on the fetus” and “Referral for prenatal care”.[36]

Both providers and patients trying to access SUD treatment services in Hawai‘i during the perinatal period face highly fragmented service delivery systems. This fragmentation can delay or derail entry to care. Myriad systems are frequently involved in addressing perinatal substance use (e.g., clinical care, corrections, courts, child welfare), and most of these systems do not have existing overlap to facilitate cross-disciplinary case management. Our current models of care – where each provider sees a woman for a specific need and is only reimbursed for specific services – limits providers’ capacity to holistically approach their care delivery unless they seek other funding sources such as grants which are limited in sustainability. More sustainable means for funding PWWDC services through insurance reimbursement of services are limited as insurance companies do not yet recognize that gender-responsive SUD treatment needs to include the children’s treatment along with the mother’s. Similarly, this fragmentation makes information-sharing between providers more challenging, complicating care coordination and reducing efficiency. Moreover, women and their families face significant obstacles of visiting multiple office locations, dealing with referrals, and coordinating multiple appointments during the already chaotic perinatal period further complicated by substance use. The inequitable distribution of healthcare services exacerbates these challenges for women in underserved areas with limited access to transportation.

Key Barriers for Pregnant Women and Women with Dependent Children (PWWDC)

SUD treatment providers in Hawai'i report several key barriers within the current system for PWWDC: 1) insufficient services for women; 2) lack of financial resources; 3) issues with coordination of services; and 4) stigma.

1) Insufficient services for women:

Women are continuing to be referred to mixed-gender programs when they would be better served in PWWDC programs. This is due to the lack of understanding of the need for trauma-informed and specialized gender-responsive care for women. Many of the mixed-gender programs do not have specialized/adapted curriculum or staff specifically trained to serve this population. Women who have experienced IPV/DV and who are placed in mixed groups with men often report feeling inhibited and unable to fully engage in the group counseling process. Creating a safe space for women to explore feelings and practice new ways to assert themselves is a necessary part of gender responsive and trauma informed care. In addition, mixed-gender SUD programs overlook necessary ancillary services for women such as childcare, transportation, and attention to extended family and relationships including with their older children and partners.

Decreasing lengths of residential treatment stays and a lack of continuum of services available to women which includes family therapy, children's treatment services and women's therapeutic living programs in combination with outpatient treatment services creates a "revolving door" effect with women re-entering treatment. Unfortunately, no data are available on this.

Immediate admission into residential treatment and therapeutic living programs is not always readily available partially due to the length of time required to appropriately reunite children, partners and family members while also continuing to stabilize mental health and early recovery. In addition to the normal time that is required by PWWDC, those who have co-occurring mental health disorders and trauma histories tend to have slower treatment progress and require more intensive levels of care and intervention for longer periods of time. Per providers (SAFTS), PWWDC residential treatment lasts an average of 6 months, while insurance companies and state contracts will typically only cover 30-60 days. Prior research among this population in residential SUD treatment found that longer lengths of stay, specifically more than six months of treatment, was associated with better clinical and psychosocial/economic outcomes.[37,38]

Infant mental health is a necessary part of providing gender responsive treatment and recovery supportive services for PWWDC, yet there is a limited understanding in what this entails beyond providing childcare while mother is in treatment. A continuing motivator for women is the ability to retain custody of their children while in treatment and/or supportive housing that can continue to support healthy parenting behaviors. Programs that understand this specialization and provide the full continuum are limited.

SUD treatment providers go through lengthy processes to become credentialed with third party payors and once credentialed, face the challenge of balancing direct service with the increasing administrative expectations (such as their authorization processes) that vary between each payor.

2) Lack of financial resources, including housing and childcare

There are insufficient safe, supportive housing and permanent housing options for women seeking and/or leaving treatment. Women consequently tend to return to less than optimal housing situations (i.e., back to a physically and/or emotionally abusive environment) due to limited financial independence and a shortage of available rental units that accept subsidized rental assistance.

Lack of appropriate childcare so that women can gain employment and feel assured that their children are safe while they are working is a major barrier for women. Women feel pressured to leave their children in less than optimal care in order to maintain employment. Furthermore, limited employment opportunities are available for women in early recovery that have a pay that can sustain not only herself but also her family. This makes resuming previous, unhealthy and illegal activities more attractive (such as the sex trade, gambling and stealing) in an effort to financially support her family.

Many of the women come to treatment with a backlog of old fines or other debt that make getting transportation, housing, or other necessities very difficult. Pressure to work in order to pay for basic needs competes with motivation to enter treatment. Indeed, lack of access to basic needs such as housing and consistency/stability in life often leads to the question - should housing or treatment come first? This is a false dichotomy, as ideally both should be addressed simultaneously.

Transportation and geographical isolation were identified as barriers especially on neighbor islands and for treatment continuation, also related to the limited number of PWWDC-serving programs across the state. For example, if a client wants to finish outpatient treatment with the same program but moves to a home location that makes attendance difficult, transportation becomes a significant challenge.

3) Issues with Coordination of Services

Due to the intensive nature of providing PWWDC programming, partnerships and coordination are key. However, frequent changes of community partners directly impact shared services provided in programs. Due to the intensity of services needed for appropriate PWWDC treatment, providers have often needed to partner with other organizations. This becomes a challenge when there is staff turnover or programmatic changes experienced by community partners, according to SUD treatment providers.

CWS is an integral partner to PPW's treatment experience/success, but several issues specific to CWS impact coordination of services:

- **Frequent turnover of CWS workers and large caseloads**: Relationship building is difficult with the frequent turnover and adds to the lack of coordination of services for families. Response time to address families' concerns is slow due to higher caseload. Delays in referrals needed from CWS to obtain other support services stall family reunification and transitions from treatment. Families do not receive timely communication from their caseworkers and find it difficult to build relationships with their workers due to the frequent changes.
- **Conflicts in foster care placements**: Familial foster care can bring forward deeper family issues which can impact reunification unless they receive timely and appropriate intervention for the whole family. Foster care providers - both familial and non-familial – face conflicting motivators such as a desire to

adopt a child versus supporting a reunification with the biological parent. They may not be supportive of visits, limit transportation, and/or act as barriers to the reunification process for the family. Families of parents with SUD also have a desire to protect the child and have observed the parent not being able to do this while in their disease. As such, now that the parent is in early recovery, this new way of being changes family dynamics which the family may not fully understand or embrace.

- **CWS (Case Worker Clinical Support)**: CWS workers are not always prepared for the emotional weight of their job and do not have the level of clinical support that they need to avoid burnout or countertransference. Unaddressed vicarious trauma can impact objectivity when working with challenging and stressful situations and families.

4) Stigma

Another aspect relevant to the system of care for PWWDC in Hawai'i is stigma towards women with SUD, particularly pregnant women, and their consequential fear to seek treatment. Women tend to experience greater stigma for substance use than men, and that is amplified further during pregnancy. Hawai'i PWWDC stakeholders have described their observations and experiences with stigma and fear at different levels within our state, which resonate with the literature, e.g., resource caregiver families stigmatizing the birth mother and her addiction; women not wanting to seek prenatal care due to past negative experiences with medical providers; fear of losing their children if they admit to substance use; fear of going back into "the system" again so they are hesitant to reach out if they are struggling or have a relapse; lack of trust and fear of being transparent about their struggles; and an attitude sometimes expressed within the system that people need to "earn" their treatment, treating people as "addicts" rather than treating their disease. These systemic and individual thought patterns impact the ability and willingness of PWWDC to seek and access treatment.

Themes of barriers and challenges for Pregnant Women and Women with Dependent Children (PWWDC) identified by MIC

The Medicaid Innovation Collaborative (MIC), which "aims to catalyze innovation in Medicaid in order to improve patient outcomes and advance health equity," recently conducted a needs assessment and published a discovery brief on this topic. Their six themes of "barriers and challenges related to seeking, accessing, and maintaining care for maternal mental health and substance use treatment" echo what providers shared above (see Figure 1 below).[39]

Figure 1. Barriers identified for PWWDC by Medicaid Innovation Collaborative, 2022

Interventions

Evidence-based or best practices in the literature

SAMHSA TIP 51

SAMHSA Treatment Improvement Protocol (TIP) 51 ("Substance Abuse Treatment: Addressing the Specific Needs of Women")[40] is an invaluable resource guide that provides best practice guidelines for the prevention and treatment of substance use disorder among women:

> *"This TIP endorses a biopsychosociocultural framework based on clinical practice and research centered on women. By placing emphasis on the importance of context, many topics examine the role of factors that influence women's substance use from initiation of use to engagement of continuing care treatment services, ie, relationships, gender socialization, and culture. The knowledge and models presented here are grounded in women's experiences, built on women's strengths, and based on best, promising, or research-based practices. The primary goal of this TIP is to assist substance abuse treatment providers in offering effective, up-to-date treatment to adult women with substance use disorders."[40](p. xvii)*

The TIP framework consists of 12 "Gender Responsive Treatment Principles" from the consensus panel, as listed in Table 5. The model used as a basis for TIP 51 is the CSAT's Comprehensive Substance Abuse Treatment Model.

AIM SUD Bundle

Like SAMHSA TIPs, patient safety bundles from the **Alliance for Innovation on Maternal Health (AIM)** are another source of collated evidence-based and best practices that are relevant to PWWDC. Coordinated by the American College of Obstetricians and Gynecologists (ACOG) and funded by the Health Resource Services Administration (HRSA), AIM is a "national data-driven maternal safety and quality improvement initiative ... [that] works to reduce preventable maternal mortality and severe morbidity across the United States."[41] The "Care for Pregnant and Postpartum People with Substance Use Disorder" patient safety bundle ("SUD bundle") is one of eight core patient safety bundles created by AIM.

"The Institute for Healthcare Improvement describes patient safety bundles as, "…a structured way of improving the processes of care and patient outcomes: a small, straightforward set of evidence-based practices — generally three to five — that, when performed collectively and reliably, have been proven to improve patient outcomes." The bundle structure does not introduce new practice guidelines or concepts, but offers a standardized approach for delivering well-established, evidence-based practices to be implemented with complete consistency, for every patient, every time – resulting in improved patient outcomes."[42]

The AIM SUD bundle, summarized in Table 6, includes five sections: Readiness; Recognition & Prevention; Response; Reporting & Systems Learning; and Respectful, Equitable, and Supportive Care. Additional details are available from AIM to assist in implementing these recommended elements.

Table 5. Gender-Responsive Treatment Principles. (Source: SAMHSA TIP 51[40]).

Principle	Description
Acknowledge the importance and role of socioeconomic issues and differences among women.	Biological, cognitive-behavioral, and psychological dimensions of women's substance use and abuse should be framed in their socioeconomic contexts including, but not limited to, employment, educational status, transportation, housing, literacy levels, and income.
Promote cultural competence specific to women.	Treatment professionals and staff must understand the worldviews and experiences of women from different ethnic and cultural backgrounds, as well as the interaction among gender, culture, and substance use to provide effective substance abuse treatment. In addition, effective treatment will depend equally on attention and sensitivity to the vast diversity among the female population, including overlapping identities of race, class, sexual orientation, age, national origin, marital status, disability, and religion.
Recognize the role and significance of relationships in women's lives.	The relational model recognizes the centrality of relationships or connections in women's lives and the importance of those relationships with respect to alcohol, tobacco, and drug use. While substance use may initially play an integral role in making or maintaining connections in relationships, the relational approach views the development of substance use disorders as a "disconnection" and stresses the development and repair of connections to others, oneself, one's beliefs, and one's culture as critical for recovery. The relational model takes a family-focused perspective, using a broad definition of family as those individuals a woman view as her significant support system. In this model, a woman's children are included in her treatment, and prevention and treatment services must be provided directly to her children and family.
Address women's unique health concerns.	Women possess distinctive risk factors associated with onset of use, have greater propensity for health-related consequences from drug and alcohol consumption, exhibit higher risks for infectious diseases associated with drug use, and display greater frequency of various co-occurring disorders. Moreover, women who abuse substances are more likely to encounter problems associated with reproduction, including fetal effects from substance use during pregnancy, spontaneous abortion, infertility, and early onset of menopause. Substance abuse treatment needs to address women's unique health concerns throughout the course of treatment.
Endorse a developmental perspective.	In general, women experience unique life course issues. Specific to women who abuse substances, these life course issues, along with developmental milestones, impact their patterns of use, engagement in treatment, and recovery. Substance use and abuse affect women differently at different times in their lives. It is important to consider age-specific and other developmental concerns starting with the assessment process and continuing through continuing care and long-term recovery.
Attend to the relevance and influence of various caregiver roles that women often assume throughout the course of their lives.	Regardless of substance abuse, women are more likely to assume primary caregiving responsibilities for their children, grandchildren, parents, and other dependents. These roles may heavily influence a woman's willingness to seek help for substance abuse, and also may interfere with her ability to fully engage in the treatment process or to adhere to treatment recommendations.

Recognize that ascribed roles and gender expectations across cultures affect societal attitudes toward women who abuse substances.	Whether or not a woman neglects her roles as a caregiver, engages in alcohol or drug-induced sexual activity, continues to use despite pregnancy, or uses sex to secure her next supply of drugs or alcohol, women with substance use disorders are significantly stigmatized by societal attitudes and stereotypes of women who drink and use drugs. As a result, women may experience feelings of shame associated with their use and the consequences of their use.
Adopt a trauma-informed perspective.	Current and past violence, victimization, and abuse greatly affect many women who abuse alcohol and drugs. Substance abuse treatment approaches need to help women find safety, develop effective coping strategies, and recover from the effects of trauma and violence.
Utilize a strengths-based model for women's treatment.	A strengths-based approach builds on the woman's strengths and uses available resources to develop and enhance resiliency and recovery skills, deepen a sense of competency, and improve the quality of her life. These strengths may include personality traits, abilities, knowledge, cultural values, spirituality, and other assets; while resources may involve supportive relationships, environments, and professional support.
Incorporate an integrated and multidisciplinary approach to women's treatment.	Treatment needs to integrate current knowledge, research, theory, experience, and treatment models from diverse disciplines critical to understanding women and substance abuse treatment. In addition to incorporating and blending information from the mental health, women's health, and social and behavioral sciences fields, treatment providers must network and collaborate with other agencies to provide comprehensive case management and treatment planning to address the complexity of biopsychosocial and cultural issues that women may exhibit throughout treatment.
Maintain a gender-responsive treatment environment across settings.	Effective treatment for women begins with a collaborative environment that is nurturing, supportive, and empowering. Women with substance use disorders are more likely to remain in a treatment setting that feels familiar and safe, includes their children, utilizes proactive case management, and fosters the development of supportive relationships across the continuum of care.
Support the development of gender- competency specific to women's issues.	Administrative commitment and vigilance is needed to ensure that staff members are provided gender-specific training and supervision to promote the development of gender competency for women.

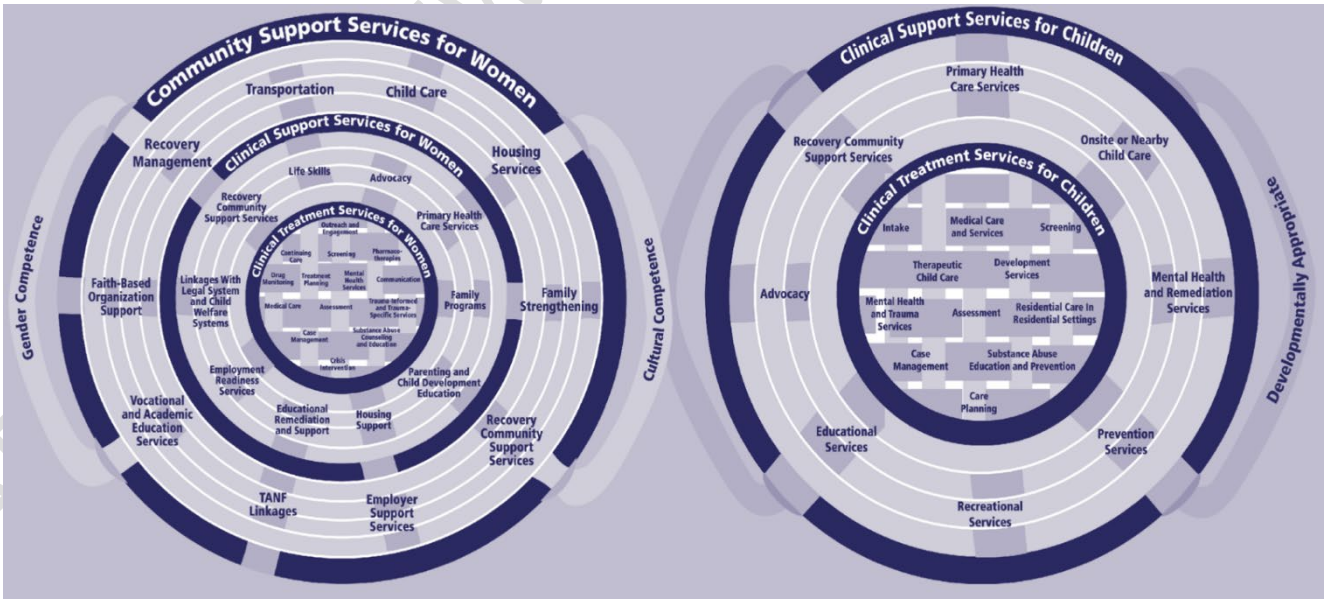

Figure 2. Interrelated Elements of Clinical Treatment and Support Services for Women and Their Children, from CSAT's Comprehensive Substance Abuse Treatment Model (Source: SAMHSA TIP 51[40])

Table 6. Alliance for Innovation in Maternal Health (AIM) "Care for Pregnant and Postpartum People with Substance Use Disorder" Patient Safety Bundle[43]

Readiness — Every Unit	• Provide education to pregnant and postpartum people related to substance use disorder (SUD), naloxone use, harm reduction strategies, and care of infants with in-utero substance exposure.* • Develop trauma-informed protocols and anti-racist training to address health care team member biases and stigma related to SUDs. • Provide clinical and non-clinical staff education on optimal care for pregnant and postpartum people with SUD, including federal, state, and local notification guidelines for infants with in-utero substance exposure and comprehensive family care plan requirements.* • Engage appropriate partners to assist pregnant and postpartum people and families in the development of family care plans, starting in the prenatal setting.* • Establish a multidisciplinary care team to provide coordinated clinical pathways for people experiencing SUDs.* • Develop and maintain a set of referral resources and communication pathways between obstetric providers, community-based organizations, and state and public health agencies to enhance services and supports for pregnant and postpartum families for social determinants of health needs, behavioral health supports, and SUD treatment.*
Recognition & Prevention — Every Patient	• Screen all pregnant and postpartum people for SUDs using validated self-reported screening tools and methodologies during prenatal care and during the delivery admission.* • Screen each pregnant and postpartum person for medical and behavioral health needs and provide linkage to community services and resources.* • Screen for structural and social drivers of health that might impact clinical recommendations or treatment plans and provide linkage to resources.
Response — Every Event	• Assist pregnant and postpartum people with SUD to receive evidence-based, person-directed SUD treatment that is welcoming and inclusive in an intersectional manner and, discuss readiness to start treatment, as well as referral for treatment with warm hand-off and close follow-up.* • Establish specific prenatal, intrapartum and postpartum care pathways that facilitate coordination among multiple providers during pregnancy and the year that follows.* • Offer comprehensive reproductive life planning discussions and resources.*
Reporting and Systems Learning — Every Unit	• Identify and monitor data related to SUD treatment and care outcomes and process metrics for pregnant and postpartum people with disaggregation by race, ethnicity, and payor as able.* • Convene inpatient and outpatient providers and community stakeholders, including those with lived experience in an ongoing way, to share successful strategies and identify opportunities to improve outcomes and system-level issues.*
Respectful, Equitable, and Supportive Care — Every Unit/Provider/Team Member	• Engage in open, transparent, and empathetic communication with the pregnant and postpartum people and their identified support person(s) to understand diagnosis, options, and treatment plans.* • Integrate pregnant and postpartum persons as part of the multidisciplinary care team to establish trust and ensure informed, shared decision-making that incorporates the pregnant and postpartum person's values and goals.* • Respect the pregnant and postpartum person's right of refusal in accordance with their values and goals.*

*See CPPPSUD Element Implementation Details: https://safehealthcareforeverywoman.org/wp-content/uploads/FINAL_AIM_Bundle_CPPPSUD-EID-1.pdf

Evidence-based theories and approaches for treatment

The above frameworks are relevant to some of the below-listed theories and approaches in Table 7.

Peer support and family mentor programs elsewhere, such as Sobriety Treatment and Recovery Teams (START)[44] and Washington State Parents for Parents (P4P)[45] have been proven effective at improving treatment success for parenting women with SUD. The Family Violence chapter of this plan also discusses the use of recovery coaches and peer partners as a suggested strategy.

Table 7. Evidence-based theories and approaches for treatment for PWWDC (non-exhaustive list)

EVIDENCE-BASED APPROACH	DESCRIPTION
Motivational Interviewing	Motivational Interviewing is a SAMHSA-recognized, best practice, strengths based clinical approach that helps people with mental health and substance use disorders make positive behavioral changes to support better health. Motivational interviewing is a directive, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve their ambivalence and achieve lasting changes for a range of problematic behaviors. The approach upholds four principles expressing empathy and avoiding arguing, developing discrepancy, rolling with resistance, and supporting self-efficacy. This intervention is interwoven throughout all levels of care as a counseling technique in both individual and group sessions and supports the change process.
Cognitive Behavioral Therapy (CBT)	CBT is among the most extensively evaluated interventions for alcohol or illicit drug-use disorders.[46] This approach is based on current research and evidenced-based practices and focuses on psychoeducation, skill building, relapse prevention and planning, cognitive restructuring, and developing a sober support structure.
Matrix Model	Evidence-based curricula from The Change Companies® and the Matrix Model. These evidenced-based journals apply Cognitive-behavioral strategies and the Transtheoretical Model of Behavior Change to address the 6 ASAM dimensions. The titles used include: Substance Dependence, Denial, Anger, Coping Skills, The Con Game, Thinking Errors, Values for Responsible Living, Relapse Prevention, Life Management, and Family Relationships. These materials present concepts clearly and simply at a low reading level with engaging graphics.
Seeking Safety Stephanie Covington's Women in Recovery: Understanding Addiction, Helping Women Recover and Healing Trauma	Gender-specific curricula include Seeking Safety, a trauma-based intervention recognized as best practice for substance use treatment for women, and Stephanie Covington's Women in Recovery: Understanding Addiction, Helping Women Recover and Healing Trauma. The six key principles of a trauma informed approach; safety, trustworthiness, transparency, peer support, collaboration and mutuality, empowerment, voice and choice and cultural, historical and gender issues are woven into the program through the use of modeling, a peer council for decision making and problem solving, senior clients who serve as peer mentors, peer support system, open attendance at staff meetings for redress of issues and grievances and the use of non-violence communication. Staff receive extensive training in trauma informed care to ensure that clients have a voice and choice.
Relational Theory	Relational theory, based on the work of Dr. Jean Baker-Miller, is increasingly cited in the women's treatment literature and is a best practice in designing women's treatment. This theory recognizes the centrality of relationship and connectedness in women's lives. The theory also considers historical/cultural issues that may affect self-concept and relational beliefs. Substance abusing women and those who have been victimized are often disconnected from self and others and are relating in ways that may make them vulnerable to continued victimization or to loneliness and isolation.
The Nurturing Parenting Programs	Parenting Education Groups address child development, positive behavior management, basic care, nutrition, safety, reunification issues, and prenatal drug exposure using The Nurturing Parenting Programs curriculum developed by Stephen J. Bavolek, Ph.D. This parenting program helps families break the cycle of child maltreatment by fostering positive and nurturing parenting patterns. It has been found to improve parenting attitudes and knowledge in multiple at-risk populations including criminal justice involved parents, parents where there has been domestic violence, and substance abusing parents.[47]
Recover and Relapse Prevention Therapy (RPT)	Relapse Prevention Class is based on the works of Terence Gorski's Recover and Relapse Prevention Therapy (RPT) which was developed for National Institute on Drug Abuse (NIDA) in 1993. Gorski-CENAPS Model is the basis for SAMHSA's TAP 19: Relapse Prevention with Chemically Dependent Offenders.[48]
Opioid Agonist Therapy (OAT)	According to the American College of Obstetricians and Gynecology (ACOG) and American Society of Addiction Medicine (ASAM), the evidence-based recommendation is for patients who are pregnant with opioid use disorder to be on opioid agonist therapy.[3,49]
Contingency Management (CM)	According to Hand et al,[28] Contingency Management (CM) has been shown to be an effective intervention in reducing substance use. CM utilizes operant conditioning principles and provides reinforcers to an individual when an objective and verifiable behavior occurs. In the case of substance use, the behavior to be reinforced is passing a drug test, attending group therapy or counseling, and other drug abstinent-related behaviors.
Child/Parent Psychotherapy	Based on the work of Alicia Lieberman and Joy Osofsky, Child/Parent Psychotherapy is an intervention designed for children under 5 years old who have experienced trauma and are now experiencing mental health, attachment and/or other emotional-behavioral problems. The primary goal being to support and strengthen the primary caregiving relationship in order to heal the child's social-emotional, behavioral and cognitive functioning.

Interventions in Hawai'i's system of care

For PWWDC in Hawai'i, several key interventions are currently being implemented, including some of those mentioned in Table 6. First, some SUD treatment providers are using **gender-specific/responsive treatment**. Treatment at SAFTS and MFRC is trauma-informed, addressing interpersonal violence as well as cultural/historical trauma. SAFTS and MFRC utilize SAMHSA-endorsed, trauma-specific interventions such as the Seeking Safety curriculum to address the impact of violence and trauma on the client, interpersonal boundaries, personal safety, and coping with emotions. Person-centered practices are interwoven within the programs. An additional evidenced-based curriculum from Stephanie Covington includes her Women in Recovery and Helping Women Recover curricula, which are an essential part of programming for any gender-responsive SUD provider. Both programs integrate culturally based practices and adapted curriculum to bring a deeper meaning of recovery and inclusion of the whole family in the healing process.

The SAFTS continuum is designed to reduce the severity and disabling effects related to alcohol and other drug use and to provide women with the necessary time needed to learn and practice their recovery skills, heal, build relationships and social networks, find a safe and stable place to live, and find meaningful prosocial activities such as employment or schooling. These recovery skills are taught through the structure of the therapeutic milieu as well as through individual and group counseling and psychoeducational classes. Practice of these skills begins in the therapeutic milieu through the modeling, coaching, and redirection from the milieu support staff, who often have lived experiences similar to the women who are served. Stabilization and development of healthy relationships with their children, family, and larger community are a necessary part of recovery for women with SUD. Through the continuum, additional services for vocational training, family/couple therapy, and infant and early childhood mental health are offered.

Another PWWDC-serving agency, the Big Island Substance Abuse Council (BISAC) is a 501(c)(3) non-profit organization which has been in operation since 1964. Current adult outpatient sites are located in Hilo and Kona on the island of Hawai'i. BISAC operates three Therapeutic Living Programs and one clean and sober living program in Hilo as part of their Moms and Babies program. BISAC Curricula utilized include: Matrix, Living in Balance, New Direction. Interventions utilized include: Motivational Interviewing, CBT, Parent Interactive Therapy, Couple/Family Therapy, etc. According to BISAC, "What works for us [for PWWDC] is a blending of interventions to meet client needs (e.g. cultural integration)."

Second, Waikiki Health PATH Clinic provides **non-judgmental obstetric care** for women with SUD; this medical clinic is co-located with residential SUD treatment services (SAFTS). "A comprehensive harm reduction model of perinatal care, which aims to ameliorate some of these difficulties for substance-using women without mandating abstinence, provides exceptional birth outcomes and can be implemented with limited resources."[50]

Third, **peer support programs** provide peer mentorship for some families involved with CWS and experiencing perinatal SUD. For example, Family Wrap Hawai'i at EPIC 'Ohana - while not exclusive to PWWDC - can provide additional support. The goal of Family Wrap Hawai'i is to get to know each family, hear their story, learn about their strengths, and identify what the family and children really need to help them get back on their feet. The EPIC team pulls together the family, service

providers, and the family's natural supporters to create a team which then meets every month. This team creates plans to meet the family's needs, assigns tasks to different team members, and works through barriers that may come up. Each team has a Wrap Facilitator, an EPIC staff person who helps orient the team to the process, follows up with participants, and ensures that commitments are met. A Parent Partner and Youth Partner are additional team members who give support to the family and youth throughout the Wrap process. The focus is always on moving things forward and working together to make the family's hopes and dreams become a reality.

Peer support for individuals experiencing SUD, including PWWDC, is a promising practice being pursued in different agencies and contexts. Going Home Hawai'i's "9 Months: Window of Hope" program is another example of a PWWDC-focused program that provides peer support.

The Makua Allies demonstration project represents a collaboration among the HMIHC PSUD WG, AIMH-HI, EPIC 'Ohana, and the Waikiki Health PATH Clinic. This pilot was designed as an adaptation of the Parents for Parents (P4P) program in Washington State and other peer support programs in the U.S. Designed by parent partners with lived experience of SUD and CWS involvement, the SCRAP model captures the System Expertise, Connection, Resources, Advocacy, and Peer Support aspects of the parent partner (ie, Makua Ally) role.

Lastly, the Hawai'i Maternal and Infant Health Collaborative (HMIHC)'s Perinatal Substance Use Workgroup (PSUD WG) has convened diverse, multi-sector stakeholders and partners since late 2019, with the aim to improve systems of care and support for perinatal women with SUD. The workgroup has identified issues, strategized how to address them, applied for funding and engaged relevant stakeholders. They have helped to develop this chapter and are also preparing a white paper to identify issues and gaps in reimbursement for perinatal substance use services currently being used by state programs and agencies. Partners engaged in the workgroup represent relevant sectors, disciplines, and communities across our state, including but not limited to: Department of Health, Department of Human Services (MQD, CWS), SUD treatment providers, medical treatment providers, judiciary/courts, academia, insurance carriers, community agencies and programs. Moving forward, ADAD's continued engagement in the workgroup will facilitate progress on the present plan's implementation. Of note, having members with lived experience with perinatal SUD on the workgroup has been invaluable and should be encouraged and developed.

Observations & Recommendations

The overall goal should be to operationalize and sustain all of the gender-responsive treatment principles in TIP 51[40] (Table 5) and all the AIM SUD bundle elements (Table 6) within Hawai'i's healthcare systems and communities. Specific recommendations for ADAD are highlighted below.

Recommendation #1: Funding for Gender-Specific/Responsive Treatment, including Children

The primary recommendation for improving PWWDC treatment in Hawai'i is to increase the availability of and funding for gender-specific/responsive treatment options, i.e., address the primary barrier of insufficient services for women. These treatment options can include both Residential and Outpatient treatment levels as well as Therapeutic Living Programs and Transitional Housing that allows children to reside with their mothers. In order to do this, greater

awareness and appreciation of the importance of gender-specific treatment is needed at the provider and systems levels. SAMHSA TIP 51, framed by the 12 Gender-Responsive Treatment Principles in Table 5 above, can be used to operationalize what should be included if a program is considered/funded as a PWWDC program, and efforts should be taken to ensure that these programs can operate in a financially sustainable way. Increasing the capacity of existing PWWDC-focused providers, and increasing the number of such providers in Hawai'i, will increase the likelihood that women will be able to access effective treatment in a timely way.

Simultaneously, it is recognized that gender-specific programs may not be possible or preferable for all PWWDC, and therefore, greater support is needed for other treatment options (i.e., mixed-gender programs) serving women in Hawai'i. Additional training and support services would enable existing providers to better serve PWWDC who are not able to (due to long waiting lists), or prefer not to, receive treatment at gender-specific providers like SAFTS and MFRC. Training for other SUD treatment providers might include: gender-responsive treatment, infant mental health, trauma-informed care, etc. PWWDC-appropriate care coordination and support services available at these other treatment options should relate to: housing, childcare, CWS/resource caregivers, peer support, family therapy, etc. as per TIP 51. Recommendations #2-4 below elaborate on these necessary wraparound supports.

One of the primary challenges for PWWDC-focused SUD treatment providers is financial sustainability. The intensive nature of treatment and supportive services required for PWWDC, as described above, is more expensive than current reimbursement provides, because treatment involves more than just the individual seeking treatment and often requires services for the child(ren), partner, and family members. Funding sources for PWWDC-focused SUD treatment providers need to be sustainable and sufficient to ensure that services are provided with the appropriate length of time necessary to address women's and families' complex needs. Alternative sources of funding should be investigated and pursued, e.g., Child Care and Development Block Grant (CCDBG) funds for childcare at treatment centers, and expanding billable services and rate increases with insurance companies for gender-responsive treatment.

Examples of how ADAD can support the implementation of Recommendation #1 include, but are not limited to:

- Advocate alongside SUD treatment providers with health plans and Med-QUEST for improved understanding of special populations (e.g., PWWDC, dual diagnosis) and appropriate reimbursement rates (and length of stay) for gender-specific/responsive treatment;

- Subsidize costs that are not covered by insurance reimbursement or other payment mechanisms, including costs of childcare, transportation, housing, etc.;
- Streamline the ADAD authorization processes;
- Engage with providers to optimize data collection and reporting, to help providers be better informed regarding quality improvement and performance measures (i.e., how can WITS help providers to collect necessary data that can drive improvement of services and outcomes?); and
- Facilitate (and require) training for all SUD treatment providers on PWWDC-focused topics, including gender-specific treatment and infant mental health.

Recommendation #2: Improved Care Coordination and Resource/Referral Infrastructure

Enhanced care coordination – as well as peer support programs (see Recommendation #3 below) – would assist with both treatment entry (e.g., identifying housing, childcare, etc. to facilitate SUD treatment entry) and transitions between and out of treatments. The myriad systems that PWWDC need to interface are overwhelming and highly fragmented, and care/service coordination is needed to ensure a continuum of care, from SBIRT to treatment(s), to continuing care supports, safe housing, and other social determinant of health needs. Care coordination will help ensure that all of the elements of clinical treatment services, clinical support services, and community support services for women and their children (as seen in Figure 2) will be addressed.

To enable effective care coordination, the current network of resources and referral agencies, along with their communication pathways, needs to be established and documented. This is one of the AIM SUD bundle action items: *"Develop and maintain a set of referral resources and communication pathways between obstetric providers, community-based organizations, and state and public health agencies to enhance services and supports for pregnant and postpartum families for social determinants of health needs, behavioral health supports, and SUD treatment."*

Examples of how ADAD can support the implementation of Recommendation #2 include, but are not limited to:

- Advocate and strategize with health plans, Med-QUEST, and other partners to ensure the high quality and financial sustainability of care coordination services available to PWWDC, via insurance reimbursement and/or other payment mechanisms; and
- Collaborate on, and consider funding for, the development and maintenance of a set of referral resources and communication pathways between SUD treatment providers, obstetric providers, community-based organization, state, and public health agencies, etc.

Recommendation #3: Sustainable and Reimbursable Peer Support Programs, and Elevation of Voices of Lived Experience in Collaborative, Decision-Making Spaces

Integrating peer support into Hawai'i's system of SUD treatment (and prevention) has the potential to improve outcomes for PWWDC and their families. Convening partners focused on peer support specialists, as well as key stakeholders (e.g., Med-QUEST Division, ADAD), would allow for collaborative discussions and progress on training, certification, credentialing, and reimbursement/payment strategies for peer support. Given the importance of child welfare to PWWDC's experiences, greater collaboration/stronger connections with CWS and resource caregiver families will help overcome the barriers discussed above. Collaborative discussions on

the issues mentioned previously would lead to training and support ideas for birth families, resource caregiver (foster care) families (familial and non-familial), and CWS case workers. Furthermore, elevating the voice of individuals with lived experience will improve the relevance and effectiveness of services and programs for this population. As the AIM SUD bundle item, *"Convene inpatient and outpatient providers and community stakeholders, including those with lived experience in an ongoing way, to share successful strategies and identify opportunities to improve outcomes and system-level issues."*

Examples of how ADAD can support the implementation of Recommendation #3 include, but are not limited to:

- Advocate and strategize with health plans, Med-QUEST, CWS, and other partners for the expansion and sustainability of peer support programs for PWWDC, via insurance reimbursement and/or other payment mechanisms;
- Consider subsidizing the costs of innovative peer support programs (e.g., Makua Allies Program) and related training/workforce development efforts that are not covered by insurance reimbursement or other payment mechanisms; and
- Include/integrate voices of lived experience across ADAD decision-making spaces, ensuring that these spaces are welcoming to those with lived experience.

Recommendation #4: Workforce Capacity and Development

There are several key recommendations for workforce capacity and development. Highly related to the previous sections on treatment access and coordination - is the need for Hawai'i CARES staff training and collaborative process improvement related to PWWDC-specific issues. PWWDC-focused providers and partners have reported that the current process for getting into treatment is a barrier and not user-friendly for PWWDC. The HMIHC Perinatal Substance Use Workgroup has engaged with the Hawai'i CARES leadership since its inception, with the goal of developing a perinatal-specific training for CARES staff that is responsive to provide feedback and concerns. Hawai'i CARES leadership team members have been supportive of the idea and attended workgroup meetings to hear feedback; however, leadership turnover has precluded progress on the training development. Some topics for potential discussion and improvement/training include: intake and screening process (e.g., more appropriate screening tool during pregnancy); logistics of assessment when there are related barriers (e.g., call-back system will not work when the client does not have access to a phone, possibility of completing assessment at first contact); insurance concerns; PWWDC-specific/relevant content (e.g., how to work with judiciary, substance-exposed infants); etc. Developing a curriculum on how to better address the needs of the pregnant and parenting women (PPW) population for the Hawai'i CARES is currently in progress at HMIHC PSUD WG.

Given the importance of child welfare to PWWDC's experiences, greater collaboration/stronger connections with CWS and resource caregiver families will help overcome the barriers discussed above. Collaborative discussions on the issues mentioned previously would lead to training and

support ideas for birth families, resource caregiver (foster care) families (familial and non-familial), and CWS case workers.

SUD treatment providers have expressed a need for greater support for insurance credentialing and billing. This technical assistance and capacity building would help maximize payments from insurance companies, without decreasing client services to meet administrative demands. Similarly, a universal credentialing process across Med-QUEST-contracted managed care plans could expedite providers' abilities to begin providing much needed services to their clients.
Examples of how ADAD can support the implementation of Recommendation #4 include, but are not limited to:

- Support the development and implementation of Hawai'i CARES staff training and collaborative process improvement related to PWWDC-specific issues;
- Engage with the HMIHC Perinatal Substance Use Workgroup, Hawai'i AIM, and network partners on workforce development, training, and other systems change initiatives to enhance the quality of care for PWWDC in SUD treatment, e.g.,
  - Resource/referral infrastructure (in Recommendation #2 above),
  - Infant mental health consultation and training, and
  - Fetal Alcohol Spectrum Disorder (FASD) consultation and training.

Conclusion

PWWDC are a high-needs population that merit prioritization for treatment given the significant, multi-generational impacts of SUD. As the leading state agency, ADAD has myriad opportunities to improve services available to PWWDC in Hawai'i in collaboration with a diverse network of partners and stakeholders. Although not an exhaustive list, four key recommendations have been presented here, along with specific action items to consider under each: 1) Funding for gender-specific/responsive treatment, including children; 2) Improved care coordination and resource/referral infrastructure; 3) Sustainable and reimbursable peer support programs, and elevation of voices of lived experience; and 4) Workforce capacity and development. Through advocacy, funding, and engagement with ongoing initiatives, ADAD can help provide more Hawai'i families with appropriate and accessible gender-responsive treatment and care during pregnancy, postpartum, and beyond.

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Rural Substance Use and Interventions

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Abstract

Hawai'i has many distinct and beautiful rural areas with unique strengths and challenges. Despite rates of alcohol and substance use typically greater than statewide and national averages, rural areas of Hawai'i have less access to healthcare services and resources. This chapter outlines some of the rural resources available and identifies programs needed, as well as ideas to decrease rural substance use. Common themes include the need for more providers and services of all kinds, the need for culturally appropriate prevention, treatment and recovery programs, and the fact that improved communication and collaboration between agencies and insurers is essential for progress. Some needs were specific to certain rural geographic areas. Hawai'i Island, in particular, needs better transportation, while Kaua'i is focused on reinvigorating youth activities. Recommendations for programs include expanding telecare, including withdrawal management options; support for prevention and resiliency activities for people of all ages; improved resources after release from jail; and increasing recovery care options. Innovative activities include the repurposing of a courthouse in Kona for a recovery center, an in-school substance use treatment program on Moloka'i, a Medication for Opioid Use Disorder Program at the Kaua'i Community Correctional Center, and telehealth withdrawal management for Hawai'i Island. Only through broad based collaborative partnerships and improved communication will the needs of rural communities be met.

Background & Introduction

What is considered rural?

There are many ways to define 'rural' in Hawai'i. For the purposes of this chapter, we consider O'ahu, also referred to as Honolulu County, as the urban core of the state, and all islands that are **NOT O'ahu** as rural. We recognize that there are areas on O'ahu that can also be considered rural and the issues discussed in this chapter often apply there as well.

Substance Use Rates in Rural Hawai'i

Rural Hawai'i has higher binge drinking, higher illicit drug use in the past month, and higher youth use of alcohol than Honolulu County (highlighted in Table 1 and other tables below).

Table 1. Adult and Youth Alcohol and Illicit Substance Use by Rural County vs. Honolulu County.

Location	Adult binge drinking*	Illicit drug use in past month >12 years old**	Youth <13 used alcohol***
Hawai'i County	18.6%	12.6%	21.7%
Kaua'i County	20.4%	10.8%	18.1%
Maui County	19.9%	15.0%	18.9%
Honolulu County	18.4%	8.8%	14.5%

* Source: Behavioral Risk Factor Surveillance System (BRFSS),Year: 2017 – 2019. Binge drinking (men having five or more drinks on one occasion and women having four or more drinks on one occasion) in the past 30 days. Retrieved from Hawai'i Health Data Warehouse.[1]

** Source: Substance Abuse and Mental Health Services Administration (SAMHSA) Substate Report. The report estimated the percentages based on 2016, 2017, and 2018 NSDUHs (National Survey on Drug Use and Health).[2]

*** Source: Youth Risk Behavior Survey (YRBS) High School. Alcohol - first drink before age 13. Year: 2015, 2017, and 2019. Retrieved from Hawai'i Health Data Warehouse.[3]

Also, of great concern is youth utilization of substances, as this can precede adult usage.[46] Monnat (2016) found that rural youth in the US have a 35% higher risk of opioid misuse disorder than urban teens, and this seems to play out in Hawai'i as well, as shown in Tables 2 and 3, which bodes poorly for future rural substance use numbers.[46]

Table 2. Middle School Substance Use by County of Hawai'i.

Middle school	Marijuana Use - ever	Marijuana at school-past 30 days*	Passenger when Driver High**	Current alcohol/ marijuana in past 30 days	Use prescription drugs without M.D.***	Alcohol-binge drinking	Alcohol-current drinker (drank past 30 days)
Hawai'i County	15.8%	3.7%	14.6%	19.1%	5.3%	6.7%	13.2%
Kaua'i County	13.9%	1.2%	11.9%	16.8%	4.1%	6.9%	12.1%
Maui County	12.3%	1.7%	10.9%	14.9%	5.0%	5.6%	10.7%
Honolulu County	9.3%	1.7%	7.7%	12.4%	4.3%	4.5%	8.4%

Source: YRBS 2015, 2017, 2019 unless otherwise noted. Retrieved from Hawai'i Health Data Warehouse.)[57]

* Data available for 2011 and 2013 only.

** Data available for 2013 and 2015 only.

*** Data available for 2011, 2013 and 2015 only.

Table 3. High School Substance Use by County of Hawai'i.

High school	Marijuana use ever	Marijuana first use before age 13	Use prescription drugs without M.D.*	Drug use-methampheta mine	Drug use-heroin	Passenger when Driver High	Current alcohol/ marijuana past 30 days	Drink alcohol at school past 30 days**
Hawai'i County	41.3%	14.0%	14.9%	5.5%	5.3%	23.8%	39.2%	9.1%
Kaua'i County	35.3%	10.5%	12.1%	5.3%	4.6%	25.7%	34.2%	5.5%
Maui County	39.2%	12.1%	12.9%	5.0%	4.3%	27.2%	37.6%	6.3%
Honolulu County	27.3%	6.5%	12.2%	3.9%	3.4%	18.7%	27.0%	5.3%

Source: YRBS 2015, 2017, 2019 unless otherwise noted. Retrieved from Hawai'i Health Data Warehouse.[68]
* Data available for 2013 and 2015 only.
** Data available for 2013 only.

As can be seen in Table 4, hospital diagnoses at discharge data aggregated by county of residence for the years 2016 – 2019, identifies Hawai'i County as suffering a larger burden of patients hospitalized for substance use-related causes than other counties of the state.

Table 4. Hospital Diagnoses at Discharge Rate due to Psychoactive Substance Use by County of Residence of Patient, 2016 through 2019.

	2016	2017	2018	2019
Hawai'i County	3.49%	3.30%	3.04%	2.94%
Kaua'i County	2.58%	2.62%	2.54%	2.80%
Maui County	2.38%	2.26%	2.27%	2.38%
Honolulu County	2.62%	2.86%	2.79%	2.83%

Note: Percentages were calculated with annual counts of the diagnoses (source: hospital billing data archive of the Laulima Data Alliance)[79] and county population estimates based on the U.S.Census as of July 1, 2019.[8]

Figure 1 displays the aggregated hospital diagnoses at discharge for patients who met criteria for a psychoactive substance use disorder upon discharge from 2016 to 2020, which indicated alcohol accounted for the largest substance causing hospitalizations statewide, and that rural areas had larger percentages of cannabis and opioid-related hospitalizations than Honolulu County.

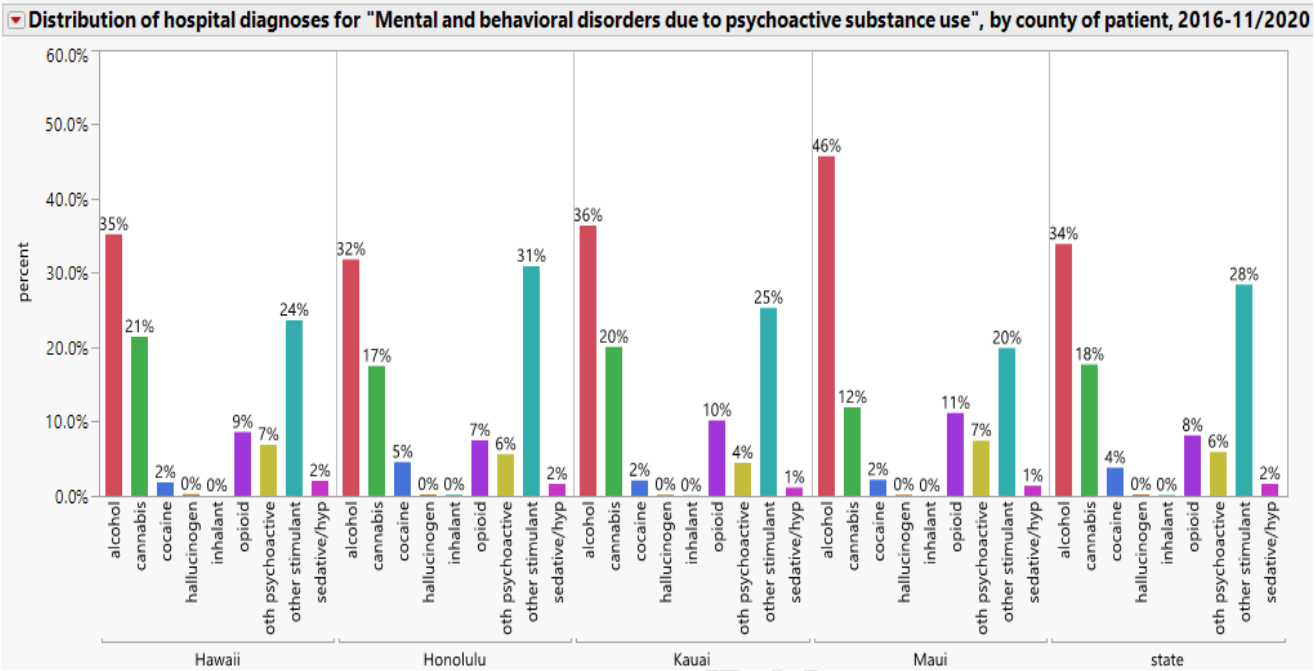

Figure 1. Distribution of Hospital Diagnoses by County 2016 – 2019. (Source: Hospital billing data archive of the Laulima Data Alliance[7])

In addition, as seen in Table 5, rural counties have higher rates of non-fatal overdoses than Honolulu County.

Table 5. Non-fatal Drug Overdose Rates of Total Population by County.

	2016	2017	2018	2019
Hawai'i County	0.20%	0.18%	0.15%	0.13%
Kaua'i County	0.19%	0.19%	0.20%	0.19%
Maui County	0.16%	0.15%	0.15%	0.16%
Honolulu County	0.15%	0.15%	0.14%	0.13%

Note: Percentages were calculated with annual number of Hawai'i residents treated for non-fatal drug overdoses in Hawai'i hospitals by county (source: hospital billing data archive of the Laulima Data Alliance)[7 9] and county population estimates based on the U.S. census as of July 1, 2019.[8]

CURRENT SYSTEM OF CARE IN RURAL HAWAI'I

Rural residents experience a greater impact of substance use than urban residents, due to challenges with accessibility, availability, and acceptability of mental health care.[9,10] Central to the issue of accessibility is being able to find services, the ability to pay for them and being able to get to and from services. Rural areas of Hawai'i have fewer available health services, including physicians,[11] and especially services that target substance use. As shown in Table 6, the Substance Abuse and Mental Health Services Administration (SAMHSA)[12] identifies zero inpatient substance abuse treatment centers in the entire State of Hawai'i . In the state, the majority of substance abuse treatment resources, are located in Honolulu County. Hawai'i County appears to have about the same number of facilities as Honolulu County for some types of treatment resources (e.g., outpatient SUD treatment and transitional housing). However, Hawai'i County covers almost twice as large area as Honolulu County, and majority of the facilities are located in relatively urban areas of the county such as Kona and Hilo. Residents of the other isolated areas in Hawai'i county as well as other neighbor islands are at a disadvantage for accessing substance use treatment

services due a limited number of services within their local communities and the distance to the available services.

Table 6. Number of Facilities by Type of Resource and County. Retrieved from SAMHSA Behavioral Health Treatment Services Locator (as of September 2021).[12]

	Hospital Inpatient	Outpatient SUD Treatment	Withdrawal Management Facilities	Residential	Transitional Housing
Hawai'i County*	0	56*	4	8**	4
Kaua'i County	0	10	1	0	0
Maui County	0	9	3	2	2
Honolulu County	0	67	10	11	4

*Outpatient SUD Treatment (n = 56) include the 38 facilities operated by Big Island Substance Abuse Council (BISAC) in different locations. It breaks down to 25 schools and 13 other facilities.
**Residential resources (n = 8) include the 5 facilities operated by BISAC in different locations.

Additionally, there is a severe shortage of treatment options for those with opioid dependence desiring treatment, recovery, withdrawal management, and harm reduction services. In 2021, there were only 156 buprenorphine prescribers statewide; 120 of them are in Honolulu County, and only 36 are located in three rural counties. When these 36 offices were contacted by a Hawai'i State Rural Health Association (HSRHA) intern in 2021, only 17 of the 36 offices (less than half) reported providing Medication for Opioid Use Disorder (MOUD) services; all located on O'ahu. There were no substance abuse centers providing MOUD services on neighbor islands, with the exception of one Hawai'i's Coordinated Access Resource Entry System (CARES) provider in Hawai'i County. Further, a needle exchange program, which is essential in harm reduction, is available only one location in the state, located on O'ahu.[13]

While efforts have been made to address the shortage of mental health and substance use providers in rural areas (e.g., federal loan repayment programs), these have not evolved as quickly as rural population increases and many rural locations, including rural areas of Hawai'i, remain designated as mental health professional shortage areas.[14] All rural areas of Hawai'i have access to Federally Qualified Health Centers (FQHCs) that make care available for those without financial resources. But not all FQHCs have mental health and substance use treatment available.

Hawai'i State has already taken many steps to curb the risks of substance use, including legalizing widespread naloxone distribution and delivery, creating and requiring the use of a prescription drug monitoring system, creating a drug disposal system, and limiting initial narcotics prescriptions to seven days only. Existing substance use- related initiatives ongoing in Hawai'i include the Hawai'i Department of Health's State Behavioral Health Assessment and Plan, Substance Abuse Prevention and the Treatment Block Grant that provides limited treatment and recovery services statewide. The Hawai'i CARES program began in December 2019 (https://hicares.hawaii.gov/). Hawai'i CARES, a partnership between the State Department of Health Behavioral Health Administration, the University of Hawai'i, and healthcare organizations, is a free, 24/7 coordination center that offers support with substance use, mental health, and crisis intervention. One specific goal of Hawai'i CARES is to identify empty recovery beds and direct patients from any island to these beds.

Ideas for Change

Between 2019-2020, HSRHA performed 12 focus groups on Maui, Moloka'i, Hawai'i Island, and Kaua'i. The focus groups concentrated on needs and resources surrounding prevention, treatment, and recovery from substance use. Over 200 community stakeholders, healthcare workers, politicians, rural health leaders, and members of groups concerned with substance use were included. The needs uncovered through the focus groups showed many similarities across regions, such as a lack of withdrawal management and rehabilitation facilities, however, many identified needs were unique to certain areas. Below, in Table 7, is a representation of the gaps and needs that are shared between a majority of the sites and some needs that are more unique to particular geographic areas.

Table 7. Prevention/Treatment/Recovery Needs Identified at the Focus Group Conducted by HSRHA.

Prevention Needs	*Treatment/Recovery Needs*
• Create a hub for online information sharing • Increase in-school training and after school activities that can take place at schools, churches and community centers but need buy-in from parents and need transportation. • Identify behavioral health/mental health/social workers/support counselors within school systems which will also help decrease suicide. • Identity support systems for families, provide therapy; Assist families to take ownership/responsibility for their health; Facilitate and strengthen family life skills/coping skills for kids and parents/resiliency training/protective factors. • Create opportunities for treatment, if needed. • Implement Senior education (Kupuna education) regarding the dangers of opioids. • Provider education to decrease stigma and prescribe fewer narcotics. • Create campaigns to change social norms and attitudes towards the acceptance of drug use. • Create or partner to have 24-hour health and wellness centers on each island/community. • Fund alternative options to using opioids and other drugs (skateboard parks/programs) • Identify safe and supportive housing for houseless families. • Increase research into causes of substance use in specific populations. • Identify ongoing/sustainable funding for prevention programs so they do not end prematurely.	• Make it easy to get help: 24-hour centers for help, triage, treatment and support/crisis shelter can be at a church or community center. • More withdrawal management beds in various facilities/settings. • More rehab beds including both medical and social. • More intensive outpatient treatment. • More providers, especially MOUD providers across the gender spectrum and sexual orientation. • Increase support groups including non-abstinence and non-religious. • Sober living communities including career opportunities for all i.e., job training/placement. • Make changes to Prescription Drug Monitoring Programs (PDMP): make sure ALL controlled substances (dispensed and prescribed) are recorded in the PDMP/establish inter-state monitoring. • Modify drug court to improve efficacy/better assistance and medical judgment on the ruling/ making Drug Court the first choice rather than the last choice. • Decrease shame, disparagement, and stigma for individuals in recovery. • Outreach such as using community health workers, mobile outreach programs, or mental health emergency workers. • Medicaid policies: increase payment with insurance providers, including travel for medications. • Coordination, connection, and communication with providers, so treatment is smooth and coordinated. • Improve health information exchange across providers and agencies.

Of course, every rural area is different and has its own unique challenges. The needs that were commented on specifically by certain geographic areas are outlined below (Table 8).

Table 8. Specific Regional Needs Identified at the Focus Group Conducted by HSRHA.

Region	Prevention	Treatment/Recovery
Maui	Prevention programs such as Project Venture; LGBT programs	Support groups for women; Coordination for pregnant mothers in recovery to keep babies
Molokaʻi	More school counselors; More family support; Vocational training Involve churches more	Cultural acceptance for recovery; Senior education; 24-hour support; family support; suicide prevention.
East Hawaiʻi	Transportation to activities; Un-normalize using drugs	Transportation like Medicaid taxi; more naloxone kits for EMS; Community paramedics; covered by insurance; data/research
West Hawaiʻi	Transportation; Law Enforcement Assisted Diversion; Research; Cultural programs	Transportation
Kauaʻi	Focus on families, parents and young adults need life skills too; Teach protective factors to decrease suicide	Prison services and transition; Emphasis on housing

Interventions and Resources in Rural Hawaiʻi

There are many excellent prevention and treatment programs in rural communities of Hawaiʻi. As a first step to improving utilization of services, the HSRHA has attempted to document rural resources in a central web location that is updated by local communities monthly. Rural resources in prevention (Table 9), treatment and recovery (Table 10) are outlined below. The most up to date information can be found on an ongoing basis at the HSRSA website https://www.hawaiistateruralhealth.org/resources/opioid-treatment-prevention/. At the time of this writing, the following services were available:

Table 9. Prevention Resources in Rural Hawaiʻi Compiled by HSRHA.[16]

Island	Audience	Prevention Resources	Website	Phone Number
Hawaiʻi	Adolescents	The Salvation Army Family Intervention Services	https://hawaii.salvationarmy.org/hawaii/fis	Hilo: (808) 959-5855 Kona: (808) 323-8081
Hawaiʻi	Native Hawaiian Community, Youth	Hoʻāla Hou – Alu Like	https://www.alulike.org/services/hoala-hou/	(808) 323-2804
Hawaiʻi	Youth	Boys & Girls Club of the Big Island	http://www.bgcbi.org/	(808) 961-5536
Hawaiʻi	Youth	Liliʻuokalani Trust	https://onipaa.org	(808) 935-9381 (808) 329-7336
Kauaʻi	Children	Big Brothers Big Sisters	http://www.bbbshawaii.org/kauai-events.html	(808) 292-8173

Island	Audience	Prevention Resources	Website	Phone Number
Kauaʻi	Children, Adults	Keala Foundation	https://www.kealafoundation.com/	(808) 755-9991
Kauaʻi	Native Hawaiian Community, Youth	Hoʻāla Hou – Alu Like	https://www.alulike.org/services/hoala-hou/	(808)245-8545
Kauaʻi	Youth	Hale ʻŌpio Kauaʻi Inc	–	(808) 245-2873
Kauaʻi	Youth	Kauaʻi Boys & Girls Club	https://www.bgch.com/	Lihue: (808) 245-2210 Kapaʻa: (808) 821-4406
Kauaʻi	Youth	Kauaʻi Lions Club	https://e-clubhouse.org/sites/kauai/index.php	(808) 651-7801
Kauaʻi	Youth	Life's Choices Kauaʻi	https://www.kauai.gov/Government/Departments-Agencies/Prosecuting-Attorney/Lifes-Choices-Kauai/Programs	(808) 241-4925
Kauaʻi	Youth	Na Lei Wili Area Health Education Center	https://www.ahec.hawaii.edu/na-lei-wili-kaua%CA%BBi/	(808)246-8986
Kauaʻi	Youth, Young Adults	Hale Kipa – Advocacy Services	https://www.halekipa.org/as/	(808) 246-4898
Lānaʻi	–	Maui Economic Opportunity – Lanaʻi Branch Office	–	(808) 565-6665
Lānaʻi	Youth	Lānaʻi Youth Center	http://www.lanaiyouthcenter.org/ourprogram.html	(808) 565-7675
Maui	Children	Big Brother Big Sister Hawaiʻi	http://www.bbbshawaii.org/	(808) 442-7890
Maui	Children and Families	Friends of the Children's Justice Center of Maui	https://mauicjc.org/	(808) 986-8634
Maui	Children, Adults	Mental Health America of Hawaiʻi	https://mentalhealthhawaii.org	(808) 242-6461
Maui	Family, Youth	Maui Family Support Services, Inc.	https://mfss.org	(808) 242-0900
Maui	Homeless	Maui Homeless Alliance: Continuum of Care	https://mhacoc.weebly.com/	(808) 242-4900
Maui	Low income	Maui Economic Opportunity	http://www.meoinc.org/	Harry & Jeanette Weinberg Family Center: (808) 249-2990 Hana Neighborhood Center: (808) 248-8282
Maui	Native Hawaiian Community	Hoʻāla Hou – Alu Like	https://www.alulike.org/services/hoala-hou/	(808) 248-7286
Maui	Youth	Boys & Girls Club of Maui	https://bgcmaui.org/	(808) 242-4363
Molokaʻi	Native Hawaiian Community	Hoʻāla Hou – Alu Like	https://www.alulike.org/services/hoala-hou/	(808) 658-6730
Molokaʻi	Youth	Molokaʻi Youth Center – Molokaʻi Community Service Council	https://www.molokai.org/programs/youth-families/the-molokai-youth-center/index.html	(808) 553-3675
Molokaʻi	Youth	Puni Ke Ola (PIKO)	https://themolokaidispatch.com/youth-photography-and-puni-ke-ola/	–
Molokaʻi	Youth, Adult	Maui Economic Opportunity – Molokaʻi Branch Office	http://www.meoinc.org	(808) 553-3216

Table 10. Treatment/Recovery Resources in Rural Hawai'i Compiled by HSRHA.[16]

Island	Audience	Treatment/ Recovery Resource	Website	Phone Number
Hawai'i	Adolescents, Adults	Big Island Substance Abuse Council	https://bisac.org/	(808) 443-8635
Hawai'i	Adolescents, Adults	Access Capabilities Inc.	–	–
Hawai'i	Adolescents, Adults	Hāmākua-Kohala Health	https://www.hamakua-health.org/	Kohala Family Health Center: (808) 889-6236 Hamakua Health Center: (808) 775-7204 Waimea: (808) 731-8641 x402 Laupahoehoe: (808) 747-6480
Hawai'i	Adolescents, Young adults	Pacific Quest	https://pacificquest.org/	(808) 937-5806
Hawai'i	Adults	Care Hawai'i Inc.	http://www.carehawaii.info/	(808) 935-7127
Hawai'i	Adults	Bridge House Hawai'i	http://www.bridgehousehawaii.org/	(808) 322-3305
Hawai'i	Adults	Going Home Hawai'i	https://www.goinghomehawaii.org/	Hilo: (808) 491-2437 Kailua-Kona: (808) 464-4003
Hawai'i	Adults	Hawai'i Island Recovery	https://hawaiianrecovery.com/	(866) 491-8009
Hawai'i	Adults	Hope Inc. – Hilo	N/A	(808) 365-5525
Hawai'i	Adults	Kū Aloha Ola Mau	https://www.kualoha.com/	(808) 961-6822
Hawai'i	Adults, Adolescents & Children	Lokahi Treatment Centers	http://www.lokahitreatmentcenters.net/	Hilo: (808) 969-9292 Kailua-Kona: (808) 331-1175 Honoka'a: (808) 775-7707 Pahoa: (808) 965-5535 Waikoloa – Corporate Office: (808) 883-0922
Hawai'i	Families	Child & Family Service	https://www.childandfamilyservice.org/	West Hawai'i: (808) 323-2664 East Hawai'i: (808) 935-2188
Hawai'i	Teens	Teen Challenge of the Hawaiian Islands	https://teenchallengehawaii.com/	(808) 966-7980
Kaua'i	Adolescents	Teen CARE – Hina Mauka	http://www.hinamauka.org/teencare/programs/	–
Kaua'i	Adults	Care Hawai'i Inc.	http://www.carehawaii.info/	–
Kaua'i	Adults	Ho'ola Lāhui Hawai'i, Kaua'i Community Health Center	http://www.hoolalahui.org/behavioralhealthservices.html	(808) 240-0194
Kaua'i	Adults	Ke Ala Pono – McKenna Recovery Center	https://mckennarecoverycenter.com/	(808) 246-0663
Kaua'i	Families	Child & Family Service	https://www.childandfamilyservice.org/kauai/	(808) 245-5914

Island	Audience	Treatment/ Recovery Resource	Website	Phone Number
Kauaʻi	Teens	Teen Challenge of the Hawaiian Islands	https://teenchallengehawaii.com/	(808) 212-1490
Kauaʻi	Women	Women In Need	https://www.winhi.org/winkauai	(808) 245-1996
Lānaʻi	Adults	Aloha House, Inc.	–	–
Maui	–	Akamai Recovery Maui	https://akamai.healthcare/	(808) 214-5931
Maui	–	Behavioral Health Hawaiʻi	https://behavioralhealthhawaii.com	(808) 243-3200
Maui	–	Maui Recovery	https://mauirecovery.com/how-we-treat/	(877) 317-8260
Maui	Adults	Care Hawaiʻi Inc.	http://www.carehawaii.info/	(808) 242-6131
Maui	Adults	Lānaʻi Community Health Center	https://lanaihealth.org/services/	(808) 565-6919
Maui	Adults	Valley Isle Healthcare	–	(808) 442-3245
Maui	Adults, Family, Youth	Maui Youth and Family Services Inc	https://mbhr.org/about-maui-youth-family-services/	(808) 579-8414 x8211
Maui	Adults, Women, Youth, Families	Aloha House, Inc.	https://mbhr.org/about-aloha-house/	(808) 579-8414
Maui	Adults, Youth, Family	ʻOhana Makamae	https://www.ohanamakamae.org/index.html	(808)248-8538
Maui	Families	Child & Family Service	https://www.childandfamilyservice.org/mauicounty/	(808) 877-6888
Maui	Teens	Teen Challenge of the Hawaiian Islands	https://teenchallengehawaii.com/	(808) 793-3440
Maui	Youth	Malama Family Recovery Center	https://mbhr.org/about-malama-family-recovery-center/	(808) 877-7117
Molokaʻi	Adults	Ka Hale Pomaikaʻi	https://www.kahalepomaikai.org/	(808) 558-8480
Molokaʻi	Families	Child & Family Service	https://www.childandfamilyservice.org/mauicounty/	(808) 553-5529
Molokaʻi	Youth	Hale Hoʻokupaʻa	–	(808) 553-3231
Molokaʻi	Youth	Ka Hale Pomaikaʻi	https://www.kahalepomaikai.org/	(808) 558-8480
Molokaʻi	Youth, Adults	Molokaʻi Community Health Center	https://molokaichc.org/	(808) 553-5038
Molokaʻi	Youth, Families	Molokaʻi Community Service Council	https://www.molokai.org/	(808) 553-3244

In order to create additional lasting interventions, HSRHA, in collaboration with Chaminade University Nursing students and the University of Hawaiʻi, reviewed the literature for best practices in rural prevention, treatment and recovery. Results relevant to Hawaiʻi for evidence-based prevention and treatment programs are described below.

Evidence-based or best practices for rural substance use prevention

Successful rural Hawaiʻi-specific prevention programs have been implemented, but they are few. The Kauaʻi Longitudinal Study examined the biological and psychosocial risk factors, stressful life experiences, and protective factors of a cohort of children born on the island of Kauaʻi in 1955.[17]

Findings indicated that a strong support system in the form of a significant adult caregiver or informal support, self-efficacy (responsibilities such as care taking, job, etc.), and opportunities (additional education, career training, military enrollment, etc.) were all factors that improve resiliency. Puni Ke Ola is a culturally based drug and alcohol prevention program for 12 to 18-year-old Native Hawaiian students that has a homestead focus. It is held at the community center after school and offers field trips and cultural programs including "Photovoice" as a strategy to engage with students. Challenges include 1) timeline and schedule, 2) participant recruitment and sample size, 3) place-based intervention intensity and transportation, 4) communication, and 5) staff time and funding.[18] Ho'ouna Pono is a middle school drug prevention curriculum tailored to rural Native Hawaiian youth that maintained youths' use of culturally relevant drug resistance skills and decreased girls' aggressive behaviors six months after completion of training on Hawai'i Island.[19] Hui Mālama O Ke Kai successfully increased avoidance of drugs in fifth and sixth graders participating in an after-school program from 2004-2007 on O'ahu,[20] and the Positive Action program decreased substance use by fifth graders on O'ahu.[21]

Across the US, some prevention programs have been tested in rural areas.[22] Hecht (2018) found that the Keepin' it REAL curriculum was effective in decreasing tobacco and marijuana use, but not other substances in rural New York.[22] Hojjat (2016) found assertiveness training increased happiness and assertiveness in rural Appalachian girls with substance using parents.[23] A study with Native American youth in California found brief motivational interviewing and psychoeducation combined with community mobilization and awareness activities, as well as restricting alcohol sales to minors, decreased alcohol use in the teen population.[24] Finally, Scull (2017) found that an online, family-based media literacy education program for substance abuse prevention in rural elementary school children called the Media Detective Family program was effective at decreasing substance use when measured three months after program completion.[25]

Rural Substance Use Treatment and Recovery Programs

Treatment options are not often tested specifically in rural areas, however a study with American Indians who inject drugs in northeastern Montana found that 98% of those responding to a survey expressed interest in a harm reduction approach.[26] Godinet (2020) conducted a literature review and found significant ethnic disparities in substance use treatment programs, with Native Hawaiians and Pacific Islanders being more likely to complete outpatient treatment than inpatient or intensive outpatient treatment services.[27] Edmond (2015) that rural and urban service differences are complicated, but access to resources improves treatment rates.[28] Cucciare (2019) found that patients with health insurance were more likely to receive treatment.[29] Jones (2018) outlined how FQHCs can assist with substance use treatment, but indicated rural FQHCs have more challenges than urban FQHCs.[30] Finlay (2018) recommends telehealth, outreach and integrated treatment for successful rural programs.[31] Tjaden (2015) recommends increasing the rural physician workforce, improving access to primary and specialty care through telehealth services, and expanding health insurance options to meet rural substance use needs.[32]

Kopak (2019) found that jails need to implement behavioral health assessments to support detainees while incarcerated and connect them to services to decrease repeated detention.[33] Shannon (2015) demonstrated the effectiveness of Kentucky's enhanced probation program called Supervision Monitoring, Accountability, Responsibility, and Treatment (SMART) which is modeled after Hawai'i's Opportunity Probation with Enforcement (HOPE) program.[34] The HOPE

Program showed a 55% reduction in rearrests, and 72% less positive drug screens.[35] Meyer (2015) found that appreciation for the severity and importance of the opioid-dependence problem in Vermont among health care providers and state legislators was paramount for success in developing a statewide treatment program.[36] Timko (2017) found that engagement in social-recreational activities was associated with fewer subsequent arrests and less severe alcohol and drug problems in rural substance using women and described the need to increase the rural physician workforce, improve access to primary and specialty care through telehealth services, and expand health insurance options for rural patients, including those in corrections.[37]

Haskell (2016) found that in general, rural Canadian participants wanted respectful, non-judgmental and supportive services that are accessible, coordinated, holistic, and inclusive of family members.[38] Screening and treatment may be influenced by the availability and advertisement of integrated services, institutional support, strong patient-provider relationships, and provider training and experience.[39] Monnat (2016) identified potential points of intervention to prevent prescription opioid misuse in teens in rural areas include early education about addiction risks, use of family drug courts to link criminal offenders to treatment, and access to non-emergency medical services to reduce rural residents' reliance on emergency departments where opioid prescribing is more likely.[4]

Palombi (2019) found that community forums planned by university faculty and community members were effective in increasing overall awareness and knowledge of the opioid crisis within rural communities.[40] Speakers from varied professional backgrounds and integrated cultural strengths were preferred. Communities that planned forums together have reported increased collaboration to prevent and address substance use and increased community member engagement on local grassroots coalitions. Community forums have functioned as an effective grassroots approach to engaging rural community members in opioid use prevention and intervention efforts.

Poor transportation and limited staff are problems in rural areas that can be ameliorated through collaborative community effort and involvement of corrections and other partners.[41] Factors that can improve rural treatment include offering buprenorphine,[30] employing highly educated counselors, providing wrap-around services, being supported by private funds, and offering diverse treatment options. Williams et al. (2019) reports that in the Hawaiian cultural context, cultural-political trauma is a key factor in developing a beneficial healing framework because current service delivery is not aligned with the objective of specifically improving treatment for Native Hawaiians.[42]

Additional Challenges

The Hawai'i CARES program is making strides in connecting individuals with substance use treatment programs, however there are still two major barriers to substance use care in rural areas. The first challenge is that different insurers reimburse differently, many need prior authorization, and some do not cover certain services. These barriers are not unique to rural areas and should be examined statewide so as to maximize benefit for all Hawai'i residents.

The second challenge is that if an individual completes withdrawal management, but there is no rehabilitation bed available, they often have no place to wait for the rehabilitation services they need to become available. The individual might engage in Individual Outpatient (IOP) services if they have a secure living situation. However, if they return to the environment they were in when

using, there is a high likelihood that the individual will be tempted to indulge in the substance from which they just withdrew. Furthermore, community service providers report that if individuals maintain abstinence after withdrawal management, they may not meet criteria for the treatment/rehabilitation program to be covered by insurance. Therefore, much more coordination is needed at all stages of treatment and recovery services.

RECOMMENDATIONS

Prevention

In order to let all rural communities develop the resources that will best help their community, it is imperative that they know what has been effective in locales similar to theirs, what services are available, estimated costs, and how to identify funding. Therefore, the Hawai'i Opioid Initiative workgroup 4: Promotion and Outreach is working to create **an online menu of evidence-based prevention programs** with links to supporting literature, contact information, estimated costs and funding resources. The aforementioned resources will be included, updated, and available at https://health.hawaii.gov/news/newsroom/state-offers-one-stop-hotline-for-crisis-support-mental-health-resources-and-substance-use-treatment-services/ and also at hawaiistateruralhealth.org. In this way, schools and communities that choose to implement prevention programs will be able to access compiled information to help them choose, adapt, and implement prevention programs in their rural areas. Local, statewide, and federal organizations willing to assist will be included in the information so that schools and communities can identify resources to assist them. We hope that with access to information on best practices, successful organizations, costs, and available funding, more communities and schools will implement prevention programs. School and community groups must be able to reach out to those who have successfully implemented change, and find out more. Then they must have access to the resources needed to do this in their own community/school.

Treatment

Treatment should be available to all rural inhabitants of Hawai'i. The Hawai'i State Department of Health's Behavioral Health Administration offers an array of treatment services, including for substance use concerns. The Adult Mental Health Division's Community Mental Health Centers (https://health.hawaii.gov/amhd/consumer/access/) and the Child and Adolescent Mental Health Division's Family Guidance Centers (https://health.hawaii.gov/camhd/family-guidance-centers/) serve clients in all rural counties. There are also school based services for students who meet the Alcohol and Drug Abuse Division's criteria for service. In order to expand services to rural areas, community health centers, located in federally-recognized areas where residents commonly have barriers accessing healthcare, are very active in finding services for patients https://www.hawaiipca.net/. In addition, https://hawaiiutelehealth.org is a partnership between University of Hawai'i and the HSRHA that provides free telecounseling to rural inhabitants. Despite all these resources, there are still many barriers to receiving treatment, including stigma and lack of knowledge of resources preventing those interested in treatment from receiving it.

Depending on the substances used, treatment needs vary. The first step, of course, is getting off of the substance, or **withdrawal management**. For some substances, this can be done safely without medical treatment, however can be more tolerable with medical care. For some

substances, individuals should be monitored throughout withdrawal management. Therefore, ideal services allow for assessing the needs of each individual and providing the appropriate level of service needed. Telehealth is an option for this if there is an alternative in-person treatment service available. Currently, in rural areas, the alternative in-person service is usually the emergency room which is neither cost effective nor an appropriate utilization of services. Therefore, some rural communities on Hawai'i Island are exploring the possibility of an urgent care/telehealth service to meet the needs for outpatient or intensive outpatient services. If services are widely available, that eliminates one barrier to withdrawal management.

Of course, treatment does not stop with an individual being free of substances in their bloodstream and one of the greatest challenges is having someone able to enter a treatment program immediately after withdrawal management. Ideally, when an adult completes withdrawal management, they go straight to a treatment facility, followed by a recovery home. If not, the likelihood of treatment success is limited, given that the patient will likely return to the environment where they have used in the past, without the opportunity to learn and practice skills to support their recovery. Therefore, there needs to be **effective coordination, temporary housing if needed and adequate resources at all stages of treatment.** The Hawai'i CARES Program is working on this important step from withdrawal management to treatment by identifying empty treatment beds and assigning patients to treatment programs with an opening, even if the program is on a different island. In such a case, transportation is, again, a challenge. To further complicate things, withdrawal management and treatment is often needed repeatedly for an individual and can be very expensive. Therefore, there must be support to ensure there are enough treatment beds, adequate financial support for treatment, and transportation to treatment as previously discussed.

Transportation is a major problem in Hawai'i County. Distances are long and the public bus system is very limited. Therefore, additional methods for patients to get to treatment, to get to the pharmacy for medications, and to get to counseling and support services is essential for improving substance use on the Hawai'i Island.

Stigma is another barrier to care and lurks in all of us if we are not careful. Stigma can be internal and make seeking treatment more difficult. Stigma can also be external in family, friends, employers, and healthcare providers. In rural communities, there is little anonymity.[43] Seeking treatment can mean exposing oneself to the perceived or real criticism of others and it can be challenging to obtain services confidentially within small rural communities. Furthermore, stereotypes can prevent recovered individuals from finding work or being accepted in a rural area. If someone goes away for treatment, they leave their support system, but they also leave the familiar patterns that facilitate substance use. We must all look at the messages we send about individuals with substance use disorders. Referring to individuals who have challenges with substance use problems as humans first (i.e., person first language[44]) can help us all decrease stigma. In addition, interprofessional education is being implemented at the healthcare provider and training levels to decrease stigma in the healthcare system. Community education, in the form of Mental Health First Aid and other community awareness programs, can be of assistance. In fact, some prevention programs that could be implemented as described above could include stigma prevention in the program. Finally, the Hawai'i Opioid Initiative is supporting a media and social media campaign that involved real stories of challenges and recovery to help the public get to know the people behind the stigma and thereby increase acceptance and support for those in recovery.

Recovery

Recovery resources are the most challenging to develop and fund due to individual patient and community complexities, the long-term nature of the services needed and the cost of housing in Hawai‘i. Ideal recovery services would include a safe place to live indefinitely where individuals are not exposed to substances or risks, but can learn to take responsibility for themselves and learn healthy behavior. Sober living homes such as Oxford Houses, need to be more accessible throughout Hawai‘i. Furthermore, assistance with employment, long term mentoring and support, and family support are important pieces of a long-term recovery plan and should be available continuously. Employment assistance programs need to be fully developed in rural areas. Religious and non-religious recovery support programs are available including online programs, and can be co-located with housing. For those without computer/smart phone and internet access, HSRHA, the Hawai‘i State Public Library System and many community health centers are providing devices and connectivity for participation in telecounseling. Peer counselors can be a valuable asset.[43] Family peer counselors are available in Hawai‘i at 808-523-7550. An example of a collaborative recovery process in development is on Hawai‘i Island, where there are plans to convert the old courthouse in Kona and the old Hilo Medical Center to recovery centers where living and services will be co-located. If successful as recovery centers, these can be an example for the other islands.

Funding

Funding is the primary challenge faced in creating and maintaining substance use prevention, treatment and recovery programs. Some organizations have excellent services which are funded by some health insurance plans or by a grant. If a program is grant funded, the funds end at grant completion, and often so does the program. Long term funding for successful programs must be continued. Furthermore, with increased coordination and collaboration between organizations, the better the services will be for individuals who use addictive substances. Ideally all individuals needing services would have insurance coverage that pays for these services, however this is often not the case. It is no surprise that there is often limited communication between insurers and providers about what is a covered benefit, medication, etc., when the reimbursement landscape is often changing and individuals change insurance coverage. Therefore, there needs to be general resource information easily available for providers and patients with different types of insurance so that they might initiate and continue treatment as seamlessly as possible. Also, long term state funding for effective programs is essential.

Evaluation

In order to better assess the needs of rural areas and the impact of interventions, data will need to be collected and maintained for discrete rural areas, or islands, not just at the county, state, or federal level. Data should include substance use hospitalizations, substance-related behavioral health visits, overdoses, and suicide rates in both the rural and urban regions of each island. In addition, feedback regarding time to appointments for behavioral health needs, frequency and type of substance-related behavioral health visits, and access to services will be important. Finally, the number of community and school-based prevention programs,

participation, and substance use rates by age group and substance type will be essential data for measuring effectiveness of programs implemented.

Conclusion

The primary themes identified for rural area needs were collaboration and communication. Collaboration between communities, schools, non-profits organizations, and state agencies is essential to maximize the adoption and implementation of substance-use prevention and intervention programs and their success. This is not unique to rural areas, but more important as the geographic areas served are often larger and with much more limited available services. An excellent example of provider collaboration is the new Hawai'i Addiction Provider Integration Network in Hawai'i County that will work to expand services to individuals in need of MOUD and treatments for substance use disorder. Partnerships like this can build both prevention and treatment/recovery programs.

Furthermore, without communication, some geographic areas may be unknowingly duplicating services. If we are able to put all resources in a centralized directory, then we are more likely to be able to partner on activities and maximize program success. In addition, communication between community service providers and insurers is essential for success in decreasing substance use. If the resources available through insurance are more easily identified, then they are more likely to be utilized and be of benefit to clients across all geographic areas. Only by cutting through red tape will we succeed in getting resources where they are needed when they are needed.

Therefore, we recommend that members of rural communities get in touch with their local community health center (federally qualified health centers are listed at https://www.hawaiipca.net/), the Native Hawaiian Healthcare Systems organization (http://www.papaolalokahi.org/), and the rural health systems organization (https://www.hawaiistateruralhealth.org/) to learn what is happening locally and how to help.

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Conceptualizing a New System of Care in Hawai‘i for Native Hawaiians and Substance Use

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Abstract

Native Hawaiians of all age groups tend to show a higher prevalence of substance use than other ethnic groups in the state. Research shows that this inequitable health status results from several complex and interconnected social determinants of health, including historical trauma, discrimination, and lifestyle changes. Before European contact, Native Hawaiians understood that balanced nutrition, physical activity, social relationships, and spirituality were fundamental to maintaining optimal health. Western influences triggered an imbalance in Native Hawaiian society, shifting the paradigm of Native Hawaiian family systems. Historical and cultural trauma affects multiple generations and is linked to Native Hawaiian health disparities. Cultural trauma is defined as “the loss of identity and meaning that negatively affects group consciousness. It marks and changes them in fundamental and irreversible ways, often resulting in the loss of language, lifestyles, and values.”[1] The remedy for cultural trauma is cultural reclamation (identified by Lynette Paglinawan).[2] Historical trauma is defined as psychosocial trauma experienced by Indigenous groups as a result of colonization, war, genocide, or cultural, social, and political subjugation.[3] These historical and cultural aspects have impacted and reached across generations of Native Hawaiians. The outcomes of these traumas are reflected in higher rates of health disparities, including mental health and addiction, which have affected the social determinants of health. Current access to treatment and recovery is limited for Native Hawaiian residents with substance use problems. This chapter envisions a system of care that would reduce silos and incorporate cultural aspects to improve outcomes for Native Hawaiians receiving services. This chapter will also introduce an ‘āina-based model for creating healthy, thriving Native Hawaiian individuals, ‘ohana, communities, and care systems.

Background & Introduction

Native Hawaiians historically sought healing within their ʻohana (family) systems. Prior to European contact, Native Hawaiians understood that lōkahi (harmony), which included balanced nutrition, physical activity, social relationships, and spirituality were fundamental to maintaining optimal health.[4-6] Native Hawaiian health has been illustrated in a Lōkahi Triangle[4-6] as an equilateral triangle, with the apex labeled as Nā Akua (Gods/Goddesses/spirituality), and the base on one end labeled as kanaka (person) and the other as ʻāina (land).

From the first European arrival in 1778, colonization, systematic oppression, and Western imperialism have led to a loss of traditional healing practices, and our Native peoples were forced into western treatment frameworks for matters that were historically addressed within the ʻohana. Our Native peoples were forced into western treatment frameworks for historically addressed matters within the ʻohana. Because of these factors and introduced diseases, approximately 95% of the population died.[7,8] At the same time, foreigners grew in numbers and power.[7,8] All aspects of the Native Hawaiian people and their culture began to deteriorate, leaving the population vulnerable to displacement, disease, and discrimination.[9]

Today, Native Hawaiians suffer from health disparities in chronic diseases[10] and overrepresentation across all social services, including addiction services,[11] incarceration for drug offenses, and offenses due to addiction diseases.[12] Intergenerational substance use and incarceration impact individual, ʻohana (family), keiki (child), and community health. Disproportionate numbers of our Native population have been consistently overrepresented among those who are seeking or thrust into Western treatment for substance use disorders.[11] Existing systems of care continue to assign treatment within the same western frameworks leading to this consistent overrepresentation

Historical Trauma

Historical trauma is defined as psychosocial trauma experienced by Indigenous groups as a result of colonization, war, genocide, or cultural, social, and political subjugation.[3] Four leading examples of trauma that contributed to the health disparities of Native Hawaiians include: 1) loss of land, 2) influx of immigration, 3) the overthrow of the Hawaiian Kingdom, and 4) military destruction and occupation.

Historical trauma affects multiple generations and is linked to Native Hawaiian health disparities. These health disparities often manifest themselves in risky health behaviors and contribute to the increased risk of chronic disease.[13-15] These risky behaviors, such as unhealthy dietary behaviors, physical inactivity, or substance use, can either directly lead to higher morbidity and mortality or indirectly contribute to higher morbidity and mortality through increasing the risk for the future development of disease.[16]

Discrimination

Following the overthrow of their kingdom, Native Hawaiians became a minority in their homeland and marginalized in the new political economy. And by 1898, Native Hawaiian were punished and shamed for speaking their Native language, resulting in the loss of many stories and cultural

traditions that perpetuated proper health practices for Native Hawaiians. Racism and discrimination were also contributing factors that caused additional stress and inequitable treatment of Native Hawaiians. Therefore, the stigma and shame of being Native Hawaiian further separated kānaka maoli (Native Hawaiians) from their beliefs and values, forcing them to assimilate to western ideologies and thereby suppressing their cultural identity.

Lifestyle changes

The traditional Hawaiian way of life "was governed by a system based on the notions of kapu (people, places, and things held under strict regulation) and noa (people, places, and things free of restriction). It was essentially resourced management and the public health system that governed how land and ocean resources were accessed and used as well as how people behaved, lived, and treated others.[17]

Foreigners imposed their Christian religion, disrupting the Native Hawaiian traditional ontology and epistemology. They used western practices to appropriate culture and privatize land and natural resources, resulting in the loss of the traditional economy.[18] Native Hawaiians could no longer depend on subsistence farming, fishing, and gathering and were forced to seek western jobs to afford a living. These lifestyle changes had long-lasting effects on the Hawaiian communal society, altering a well-balanced, nutritious diet, and an active lifestyle for holistic wellness and disease prevention. Native Hawaiians joined contract laborers from Japan, China, Korea, Portugal, Puerto Rico, and the Philippines, working long hours on plantations for very little money. The arrival of missionaries in Hawai'i further undermined the national natural order of affairs; they actively influenced nā ali'i (the chiefs) to denounce, deny, and criminalize the practice of Native Hawaiian cultural traditions and spiritual practices.

These historical aspects have impacted and reached across generations of Native Hawaiians. The outcomes of these traumas are reflected in higher rates of health disparities, including mental health and addiction, which have affected the social determinants of health.

Observations & Rationale

Our Native 'ohana have become disconnected from their cultural heritage throughout generations. Many of these 'ohana carry intergenerational trauma created by oppression and criminalization of the Native identity at the hands of those who colonized our island home. Further layers of complexity are added through the loss of land and abrupt lifestyle changes from subsistence living into a capitalistic environment, the ramifications of which created stark socioeconomic differences between Native Hawaiians and their western counterparts. Stark differences have led to generations of poverty, houselessness, and mental health issues for Native Hawaiians that continue today.

The Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5) recognizes the unique nature and importance of cultural concepts of distress. However, a Native Hawaiian worldview has not yet been included in those listed. The Cultural Formulation Interview and supplemental modules provide a framework for assessment and a first step in approaching these areas through a broader lens. However, when in distress, seeking medical, behavioral/mental health, or substance use services, our Native people are treated by clinicians trained in predominantly western ways. Therefore, clinicians working with Native individuals and families

must be educated on our history, historical injustices, traumas, the impacts of colonization, traditional beliefs and practices, and understanding of the Hawaiian worldview.[19]

In Canada, the First Nations Health Authority sees their Indigenous population disproportionately represented by overdose deaths. To make seeking help more culturally responsive, they now provide KUU-US, a "First Nations and Aboriginal specific crisis line available 24/7, regardless of where individuals reside in British Columbia."[19] Their services are for First Nations, by First Nations, and all crisis response personnel are certified and trained in Indigenous cultural safety and therefore bring an understanding of First Nations history and trauma from the residential school to their roles. Last year, KUU-US helped over 10,000 individuals with mental health issues and crises related to residential school, child welfare, addiction, health concerns, divorce/separation, suicide ideation/survivorship, grief/loss, crime, abuse, peer pressure, and financial distress.[19]

Indigenous cultural safety training is a concept that should be mandated for all those working with Indigenous peoples and communities. One such example of this training is called San'yas. The goal of the training is to strengthen the skills of those working both directly and indirectly with Indigenous populations of British Columbia. Their website explains the San'yas training as follows:

"Skilled facilitators guide and support each learner through interactive course materials. The course participants examine culture, stereotyping, and the consequences and legacies of colonization. Participants will learn about terminology, diversity, and aspects of colonial history such as Indian residential schools and Indian Hospitals and a timeline of historical events."[19]

To develop effective, culturally focused approaches for working with Native Hawaiians, we must look i ka wā kahiko (to ancient times), to our kūpuna (elders), and to respected healers within our community to understand how maʻi (sickness) was approached during ancestral times. Hawaiian maʻi, Hawaiian illnesses, or maʻi kamaʻaina, call for Hawaiian assessment, diagnosis, and treatment which is an ancient concept with deep roots in Hawaiian healing. Maʻi malihini or illnesses that stem from western influence, such as infectious or chronic disease, could be treated through western medicinal pathways. However, they are still best coupled with traditional kanaka health and well-being approaches to heal the spirit. For substance use, the root of this kind of maʻi is much deeper, and it could be understood almost as an amalgamation of maʻi kamaʻaina and maʻi malihini. Understanding these concepts requires deep reflection and study (with practitioners of Hawaiian healing) of maʻi that contributes to an unhealthy kānaka environment, such as historical/intergenerational trauma and the loss of connection. Also, by understanding the root causes of maʻi kamaʻaina (Hawaiian illness), as well as the manifestation of addiction as a symptom of this deeper trauma,[20] practitioners can be better prepared to provide culturally focused interventions.

To the tradition-imbued Hawaiian, questions about family relationships and health histories are more than rude. Answering such questions takes on the quality of kaulaʻi na iwi i ka lā or even holehole iwi. Both were once actual practices. Kaulaʻi na iwi i ka lā was "bleaching the bones of one's ancestors in the sun." Holehole iwi was the grim preparatory step, literally removing or "stripping the bones" off the dead body. Today "drying the bones in the sun" means talking too freely about ancestors to non-family members. "Stripping the bones" is the more serious offense of airing the faults and weaknesses of relatives or ancestors to outsiders.[21]

It is also important to determine the best approach for our Native people during the intake or assessment process. Throughout generations, many of our Native ʻohana have disconnected from their cultural heritage and carry intergenerational trauma created by the oppression and criminalization of the Native identity. This trauma is then compounded upon and passed down through generations.

Some manifestations of this are outlined in the 3-volume set of *Nānā i ke Kumu*. The negative self-concept is outlined in Vol 2,[22] where a client equates nearly every misfortune or failure with being Hawaiian.

> *""The reason all this trouble happens to me is that I'm Hawaiian. There's nothing good about Hawaiians."*
> *"It's this way (on welfare) with us because we're Hawaiian. It's not this way with other people."*
> *"A Chinese-Hawaiian boy in trouble with the law: "It's the bad Hawaiian in me. Why are you trying to help me? I'm a bad Hawaiian kid.""*[22]

Some of this extremely low self-image is linked with low socioeconomic status. Clients are embarrassed and ashamed because: "I live in public housing." "We're on welfare." "All the kids at school know I go to the free clinic." "Everybody's always snooping, taking surveys about us."[22]

Further layers of complexity are added with the individual or *ʻohana* feeling shame or denial of their cultural ways. It can be hard to tell whether a client expresses these feelings out of shame, embarrassment, or protection of sacred kuleana (responsibility).

> *"The Hawaiian who says, "I don't know anything about the old ways," or "We don't talk about that" may be only protecting traditional beliefs from scorn or skepticism; he may actually be quietly proud of his cultural heritage.*
> *It is the Hawaiian who talks of "silly superstitions" and "awful heathen beliefs" who is obviously trying to separate himself from an ethnic past that embarrasses him.*
> *It partly stems from handed-down attitudes that began with initial encounters with Westerners, missionaries, and laypeople.*
> *It also stems from an only surface knowledge of old beliefs so that rituals, but not their reasons, are known. And rituals of any time and culture may seem foolish if their purpose is not understood.*
> *It stems from fragmented and distorted knowledge of culture so that the wisest and beneficial beliefs and institutions are thought to have been destructive and shocking.*
> *For example, Kahuna is often associated with sorcery but not healing. That wise and wonderful family therapy, hoʻoponopono (Native Hawaiian practice of healing families through forgiveness), is confused with hoʻomanamana, false worship, or attributing strange power to something that has no power.*
> *It also stems from a failure to view Hawaiʻi's ancient beliefs from the perspective of world history.*
> *Example: Hawaiians believed in "heathen gods." Without perspective, many Hawaiians think such belief was "shameful."*
> *In perspective: Hawaiʻi prayed to Kāne, Kū, Lono, and Kanaloa; Greece to Zeus, Apollo, Aphrodite, and Artemis; Rome to Jupiter, Venus, Diana, and Mars. From all these beliefs came the inspiration for great literature and art."*[22]

Aunty Lynette Paglinawan, a revered haku hoʻoponopono (cultural practitioner in the Native Hawaiian practice of healing families through forgiveness) and social worker who studied under Aunty Mary Pukuʻi (a revered cultural practitioner), offers us some of the most valuable insight into how to conduct an assessment with Native Hawaiian individuals and ʻohana through her and her husband Uncle Richard "Likeke" Paglinawanʻs work in the community, as well as the 3 - volume set of *Nānā I Ke Kumu*.

It is also important to determine the best approach for our Native people during the intake or assessment process to determine whether a culturally grounded healing would be most beneficial. An excerpt from *Nānā i Ke Kumu* provides an example of Indigenous assessment[2]:

> *"This is where you create the climate for a committed collaborative, working together effort in a safe healing context. It is the setting up of the work base.*
>
> *Do an assessment of (the) family's culture-based beliefs and practices in this phase. This helps to determine whether a culture-based intervention has relevance with the family's stated sense of identity. This is a departure from the traditional times in that families were more in touch with the philosophy and values of the hoʻoponopono practice, and doing an assessment was unnecessary.*
>
> *Through the interview, haku seeks data about the Hawaiian beliefs and practices of individuals and families. Since many families do not label their practices as Hawaiian, Japanese, etc., you will need to become familiar with their Hawaiian family practices or any they know of.*
>
> *For example, during the first interview, the haku learned that besides Hawaiian ancestry, the family clearly identified with the Hawaiian ideas and practices. How is this reflected in their beliefs and activities? Well, if the family believes in the importance of family, find out what they do together that illustrates this value. For example, does the family join in singing and/or playing ʻukulele (musical instrument) together? Do they canoe, camp at the beach, kōkua (help) with, and attend ʻohana gatherings? Do the parents have a belief and keen respect for moeʻuhane (dream) and hihiʻo (vision seen when just going to sleep or just awakening)?*
>
> *Some Hawaiian practices could include the use of Hawaiian plant lāʻau (medicine), pī kai (cleansing) after funerals, understand kahu luhi (extend a helping hand to a family as temporary caretakers) of nieces and nephews, participate in Hoʻoponopono (Hawaiian problem solving) while kupuna was alive but don't do it for themselves, do pule ʻohana (family prayers). Do their children have Hawaiian names which they got from a dream, or turned to Kupuna to name each child? The above facts indicate the family lives these practices and are a good candidate for a culture-based intervention."*[2]

Assessment and intake from a western approach can be off-putting and invasive for some Native Hawaiians. Culturally, we must take a more Indigenous approach by "talking story" with the ʻohana or individuals. Caseworkers must voice intentions, explaining why questions may be asked and how they will be applied to the problem at hand.[21] During the intake or assessment process, it is also important to determine the best approach for our Native people to determine whether a culturally grounded healing would be most beneficial.

Similarly, there exists a gap or disconnect between Indigenous assessment and the application of cultural interventions. This disconnect or gap may be largely due to incongruent western standards to which culturally-focused interventions are measured and can be further illustrated in the table below by Okamoto et al., who points out the limitations experienced throughout the development of varying culturally-focused intervention categories.

Table 1. Strengths and limitations of approaches in developing culturally focused interventions (used with permission from Okamoto et al. (2014)[23]

Culturally grounded prevention		**Deep-structure cultural adaptation**		**Non-adaptation/surface-level**	
Strengths	Limitations	Strengths	Limitations	Strengths	Limitations
Community is engaged and invested in the development of the program	Time Consuming	Based on empirically supported intervention principles	Assumes the core components of an evidence-based program are applicable across cultural groups	Tests the applicability of generic/ universal prevention principles to unique groups	Often unacceptable to or disconnected from the community
Directly addresses core cultural constructs	Expensive	Balances length of time and costs to develop curriculum with the ability to bring the program to scale	Need to specify and retain the core prevention components for fidelities	Faster to develop, implement, and bring to scale	Can potentially avoid core cultural components
Core prevention components are derived organically (from the "ground up") and can therefore be intertwined with core cultural components	Difficult to evaluate and replicate in similar settings	Engages the community, but within the parameters of a specific evidence-based program	May inadvertently alter core components and decrease their effectiveness	Based on empirically supported interventions, but with questionable "fit."	

Okamoto's Table 1[23] provides an assessment of the strengths and limitations of developing culturally focused interventions. In summary, culturally grounded interventions provide a "ground-up" approach from a foundation of culture. Non-adaptation, surface-structure cultural adaptation interventions provide a "top-down" approach, altering the original model to add cultural components. Finally, deep-structure cultural adaptations use a "sprinkling in" approach of integrating culture into the intervention, providing "changes to images or phrases throughout its content or lessons, to align the program with familiar concepts or references of a specific cultural group." Providers that utilize culturally-based treatment focusing on Native Hawaiians provide interventions in alignment with Okamoto's categories. However, most providers lack the capacity to develop an evidence base that meets western requirements, as illustrated in the limitations set by Okamoto et. al.

Indigenous ways of knowing provide evidence that predates any semblance of western evidence, yet the western way is somehow dominant today. An indigenous evidence base has been established

orally by passing down the knowledge of our people through traditional practices, storytelling, song, and much more. The Indigenous evidence-based , coupled with evidence from community-based participatory action research approaches, should be used to develop and measure the efficacy of culturally resonant/attuned interventions.
Recovery and healing are lifelong processes. Therefore, we must begin to re-envision the existing continuum of care, embrace culturally grounded approaches, and begin to see the entire continuum as cyclical rather than linear, with each area of focus informing the next.

From a western lens,[24] the four sources of evidence are described for patient-centered, evidence-based practice: (1) research, (2) professional knowledge/clinical experience, (3) patient experience & preferences, and (4) local data & information. At the center of these four sources, an intersection forms a new evidence base.[24] From a western lens, the research has assumed priority over other sources to provide watertight answers to questions posed. However, the research evidence is social and historically constructed and can be interpreted differently by different stakeholders, varying by individuals within a group, a community, or even within a profession.[24] One form of evidence-based is professional/clinical knowledge, and this is knowledge accrued through professional practice and life experiences.[25] Just as real-life clinician experience informs practice evolution, so should cultural practitioner knowledge and ancestral knowledge broaden our understanding of what is accepted as evidence not to become siloed in western ways and to uplift and prioritize other ways of knowing.

For example, in Aotearoa (New Zealand), *Mahi a Atua*, a culturally grounded intervention, is now a part of their front door mental health services. *Mahi a Atua* (tracing the ancestral footsteps of the Gods) is being offered as a Māori approach to primary mental health care under the Ministry of Health's Mental Health and Addictions Project. *Mahi a Atua* is a *kaupapa* Māori (Māori methodology) way of engaging with, assessing, and treating *whaiora* (distressed people) who present with mental health problems. It is based on *pūrākau* (Māori creation and custom narratives).[26]

This is one example of how the western DSM and International Classification of Diseases (ICD) diagnosis can be utilized to fit our own needs in referring to culturally grounded interventions.

Peer recovery specialists and group peer support can also be invaluable resources for our Native people. Unfortunately, often "recovery spaces" do not resonate with Indigenous peoples, Indigenous way of healing, individuals of color, or those who may wish to pursue a more culturally grounded or holistic pathway to healing. Many times, "recovery spaces and recovery language" can often feel exclusive to individuals of color, and those whose cultural backgrounds may be deeply rooted in community, pilina (connections), and ʻohana (family. The existing western frameworks do not always resonate with Indigenous peoples. Western barriers of self-disclosure can often be inhibiting when working with Native Hawaiians. Indigenous peer recovery specialists bring themselves, their ʻohana lineage, and their moʻolelo (story) into their workspaces. Recovery and healing are lifelong processes. Therefore, we must begin to re-envision the existing continuum of care, embrace culturally grounded approaches, and begin to see the entire continuum as cyclical rather than linear, with each area of focus informing the next.

Current System of Care in Hawaiʻi

To better understand the current system of care and needs related to substance use, a literature review was conducted, and input and feedback were obtained from more than 40 stakeholder

groups. These sources were incorporated into determining the scope of the issues and to describe the needs or gaps in our current systems of care.

According to the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD), Native Hawaiians were admitted to treatment 1,358 times in 2017, which is 42.3% of the State total and the most of any ethnic group.[27] This overrepresentation of Native Hawaiians in ADAD treatment services has been reflected for almost two decades comparatively to Native Hawaiians representing 20% of the overall state population depicted in Figure 1 below.[11]

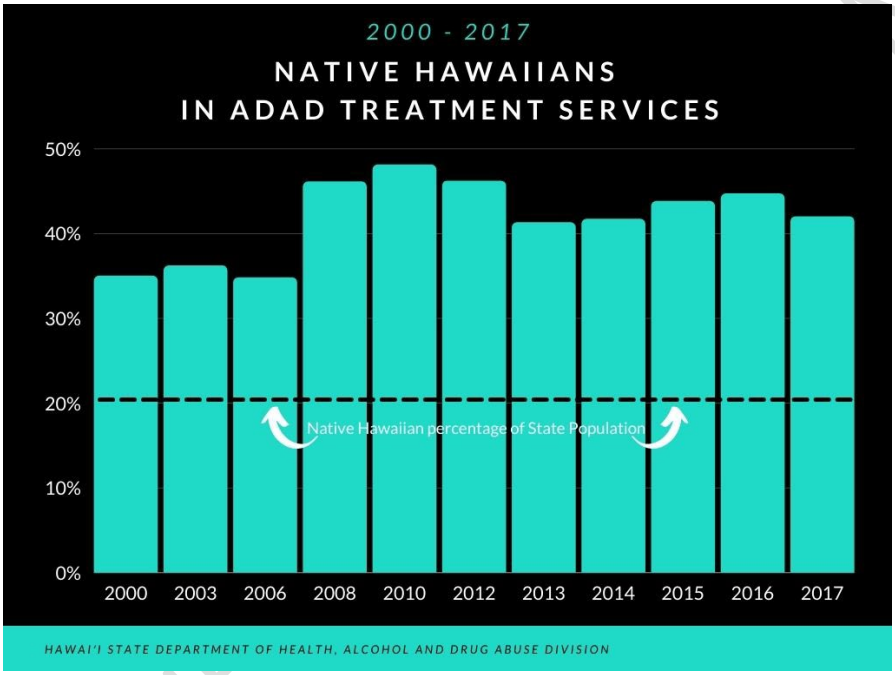

Figure 1. Percent of Native Hawaiians in ADAD Treatment Services from 2000 to 2017, summarized from Office of Hawaiian Affairs' Health Indicator Sheets Regarding Substance Use 2012, 2014, 2016 (https://www.oha.org/mauliola).

Seen in Figure 2 below, Native Hawaiian youth (grades 9 – 12) have shown higher rates of ever having used heroin (4.7%), cocaine (7.8%), ecstasy (8.5%), and other injection drugs (4.7%) when compared to the overall US rates (2.1%, 5.2%, 5.0%, 1.8% respectively).[28]

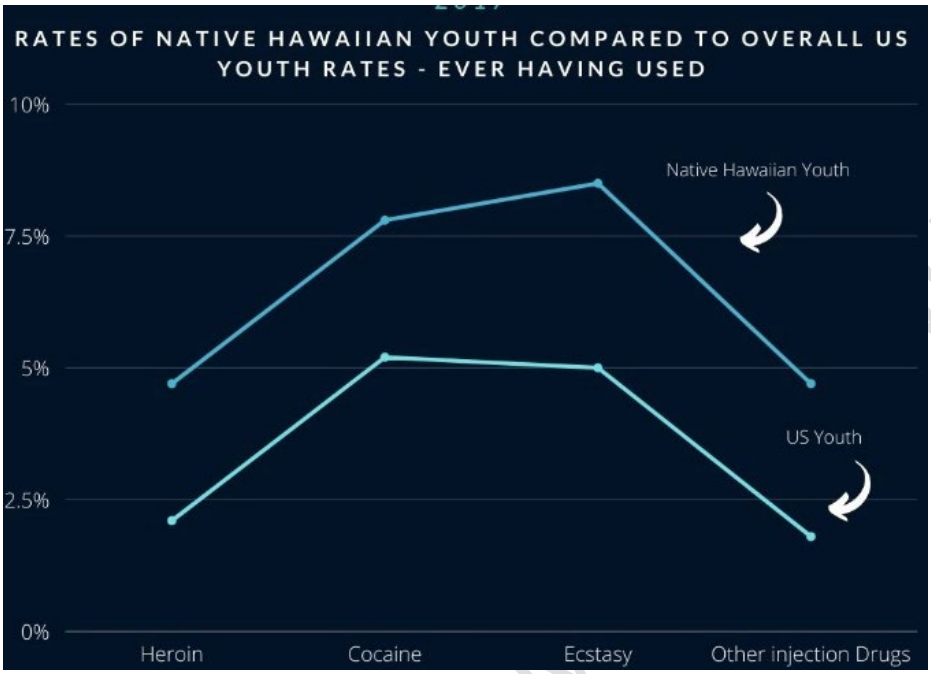

Figure 3. Lifetime Rates of Native Hawaiian Youth Compared to Overall US Youth from the 2015 Youth Risk Behavior Survey[28]

However, data shows that Native Hawaiian youth are being arrested primarily for Marijuana, and at higher rates than other ethnicities in Hawai'i.[29,30]

In 2020, 38% of adult persons incarcerated in Hawai'i for which "serious drug offenses' were listed as their lead charge were identified as Hawaiian or Part Hawaiian, and 39% for those listed with "drug paraphernalia" as their lead charge. In addition to the previously mentioned charges, it is also important to note a high proportion of Native Hawaiians were also listed with property crimes or revocation as their lead charge, 40% and 36%, respectively.[31] Property crimes are often associated with poverty and/or support of substance issues, and revocations are often related to positive drug screening as a condition of parole or probation. We do not currently have the data for this association but would like to note this would be an essential data source to review. We also acknowledge that the Hawai'i corrections department and its associated programs are not the purview of the Department of Health and are not associated with ADAD or subject to their oversight. However, once released from incarceration, if drug screening or any other substance-related programming is a condition of release, parole, or probation, the individual is referred to ADAD or other related services.

In 2018, over 30% of all Native Hawaiian admissions to ADAD treatment were referred via the criminal justice system, increasing to over 40% in 2020. Of those Native Hawaiians accessing services, over 40% indicated methamphetamine addiction as their primary substance of the issue. Heroin & other opioids were the substance of choice of just over 4% (reported with permission from ADAD).[32] This consistent overrepresentation further illustrates the need to change the way we provide services to Native peoples and focus more on methamphetamine treatment within the Hawai'i population.

About $16.1 million in state and federal funds were spent on statewide treatment services in 2017. Of those funds, 45.7% were spent on Native Hawaiians (Table 2).[11]

Table 2. Native Hawaiians and treatment services. Adapted from 2010-2018 Strategic Results: Substance Abuse Indicator Sheet 2018.[11]

	2013	2014	2015	2016	2017
# of Native Hawaiians (NH) served	1,645	1,636	1,656	1,581	1,358
% of NH served	41.3%	41.7%	43.8%	44.7%	42.3%
$ spent on NH	**$7,757,781**	**$7,853,227**	**$8,537,998**	**$7,954,489**	**$7,371,831**
% of total spent on NH	**43.7%**	**45.2%**	**47.4%**	**47.4%**	**45.7%**
Total	$17,761,437	$17,375,319	$18,026,379	$16,793,828	$16,113,778

ADAD collects, uses, and develops fund allocations based on ethnicity data. Due to those efforts, ADAD can identify the disproportionate representation of Native Hawaiians receiving services for substance use in the state. ADAD receives around 60% of its funding from general funds, 2% from special funds, and 37% from federal funding.[33] Due to the high risk of substance use among Native Hawaiians, ADAD has a federal Substance Abuse Prevention and Treatment mandate pursuant to 42 USC Sec. 300x-63 through the Substance Abuse and Mental Health Services Administration (SAMHSA) Block Grant to target services to the Native Hawaiian population and track spending on those services. This information is then reported to SAMHSA each year and available upon request. As a result of ADAD's focus on Native Hawaiians, when it issues a request for proposals (RFPs) for contracted services, it lists Native Hawaiians as a priority population. Therefore, service providers who identify themselves as cultural providers and have a proven track record are given priority for contracts targeting the Native Hawaiian population. It is important to note that Native Hawaiians are not the only targeted population and thus are not the sole focus of all RFPs.

Current policies allow for flexibility, tailored to Native Hawaiians in set activities for treatment providers, thus allowing for the offering and inclusion of alternative treatment methods. However, the current gap exists in providers, cultural practitioners, and ADAD discussing and agreeing upon culturally resonant documentation and reporting of cultural services in clinical notes on how their treatment improves protective factors or reduces risk factors. This gap can be addressed by developing a culturally responsive system of care that uplifts and values Indigenous knowledge and cultural healing pathways.

In the current care system, multiple providers are contracted to provide services at different stages of care and treatment related to substance abuse. These providers are contracted through a procurement system throughout the state.[34] The "Continuum of Care" is a concept involving a system that guides and tracks patients over time through a comprehensive array of health services, spanning all levels and intensities of care.[35] The continuum of care covers healthcare delivery over a period of time.[35]

The current system of care in Hawai‘i does include some providers who utilize varying degrees of culturally based or culturally adapted treatment and prevention programs. Treatment providers who contract with the ADAD adhere to the 5 Levels of Care (LOC) model that was most proestablished by the American Society of Addiction Medicine (ASAM),[35] which includes early intervention, outpatient, intensive outpatient, residential, and medically managed services.[36] Most providers utilize western interventions such as cognitive behavioral therapy (CBT), dialectical behavior therapy (DBT), or 12-step programs (a model used for Alcoholics Anonymous/Narcotics Anonymous (AA/NA)).

- Level 0.5: Early intervention services
- Level 1: Outpatient services
- Level 2: Intensive outpatient/ Partial hospitalization services
- Level 3: Residential Inpatient services/Clinically Managed Low-Intensity Residential Services/Clinically Managed Population-Specific High-Intensity Residential Services/Clinically Managed Medium-Intensity Residential Services for adolescents
- Level 4: Medically managed intensive inpatient services

Treatment providers (below) who mention use of culturally based treatment with a specific focus on Native Hawaiian values continue to find difficulty in billing for cultural services to ADAD, as well as including cultural services in treatment plans to accurately capture the successive impact that cultural reclamation can have on the individual, the ‘ohana, and the community. For Kānaka Maoli, cultural reclamation can be defined as a spiritual/cultural healing process of reawakening within the na‘au (visceral mind) to deeper learning and understanding of the underlying reasons for their cultural beliefs, cultural practices, and their true identity as Kānaka Maoli.[37] Learning about one‘s history and cultural heritage, genealogy, and cultural morals and values, making ancestral connections, engaging in cultural practices (e.g., working in the lo‘i (taro field), dancing hula) and learning to speak one‘s language facilitates healing and cultivates cultural pride, which nurtures the development of a positive cultural identity and overall self-image.[37] Ultimately, cultural reclamation leads to reasserting one‘s worth and value as an indigenous individual and gives that individual an additional protective layer of inner strength to overcome life stressors.[37] Most providers are dependant on outside funding to cover the costs of cultural practitioners to provide culturally-based healing, which only further silos culturally-based approaches from western treatment constructs and places a burden on the provider to maintain two separate pathways of healing.

- Ho‘omau Ke Ola [O‘ahu] (https://hoomaukeola.org)
- Bridge House [Hawai‘i Island] (https://www.bridgehousehawaii.org)
- Ka Hale Pomaika‘i [Moloka‘i] (https://www.kahalepomaikai.org)
- Kū Aloha Ola Mau, Hui Ho‘ola o na Nahulu O Hawai‘i [O‘ahu, Hawai‘i Island] (https://www.kualoha.com)

The State also supports youth prevention programs, both school and community based.[38] Given the reliance on nationally endorsed evidence-based practices, the majority of youth substance use programs implemented in Hawai‘i have not been designed to support Native Hawaiian youth and communities.[39] Two exceptions are the school-based Ho‘ouna Pono middle school drug prevention curriculum[40] and the Hawaiian Homestead based Puni Ke Ola[41] adolescent substance

use program. The National Institute on Drug Abuse-funded Hoʻouna Pono program has been evaluated in a set of studies,[42] and currently is working with their state partners to develop a sustainability strategy.[43] The Puni Ke Ola program has been supported through a variety of local and national sources in the intervention development[44] and feasibility phases,[45] aligns with a Culture-as-Health framework,[46] and currently is funded by ADAD and Papa Ola Lōkahi in preparation for multi-community implementation.

Convening the Voice of Hawaiʻi

Papa Ola Lōkahi convened virtual Native Hawaiian Substance Use Stakeholder Meetings across the paeʻāina (archipelago) of Hawaiʻi in late October 2021. These gatherings engaged stakeholders in an inclusive and interactive process to understand what Native Hawaiian culture could and should look like across the continuum of care in substance use services. The comments provided illustrate a set of common themes, priorities, and recommendations identified across all communities to create a Hawaiian culture-based continuum of care substance use system that serves the best interests and needs of Native Hawaiians.

Concerns

Limited Neighbor island substance use services

- The limited number of substance use treatment services on the neighbor islands surfaced as the top concern by stakeholders across the various island communities. Participants expressed, that the need for individuals to seek higher levels of care off island provides a disconnect between the individual and their families and makes it really difficult for reunification. It also disrupts the health and wellbeing of the communities of ʻohana. This treatment gap has also been reported to lead to unnecessary and inappropriate incarceration for Native Hawaiians affected by substance use disorder. Systemically, inappropriate placement spirals into a cycle and "revolving door" of incarceration where kānaka possess disproportionate representation in the criminal justice system with higher rates of criminal charges and sentencing instead of receiving appropriate treatment and care.

Limited ʻohana support

- A related concern is the limited of support for the entire family to understand substance use disorder (SUD) and learn strategies to attend to their own support needs and self-care. Participants identified SUD as a family disease that affects all members of the ʻohana. It needs to be addressed with appropriate interventions for the holistic healing of everyone within the family unit. "There is a need to involve the entire ʻohana in treatment to sustain clean and sober living in recovery," a participant stated. "Connecting families to housing and ʻāina (land) to allow healing and practice of shared kuleana (responsibility) to do "real life together."
- ʻOhana are desperate for any help for their loved ones, especially for on-island treatment for severe issues with substance use and mental health

Strengths

Pilina (connections/relationships)

- Stakeholders strongly agree that their key strengths are grounded in the pilina, relationships shared with one another as an ʻohana of collaborators committed to creating healing pathways to address Native Hawaiian substance use.

Existing systems of support

- Stakeholders commonly identified existing community organizations, substance use programs, services, and churches as healing spaces for the Native Hawaiian community. This emphasis recognized the value of these spaces to provide effective support within their area of expertise across the continuum of care.

Envisioning a Preferred Future: Addressing Needs and Gaps and Supporting Professional Development Pathways to Create a Hawaiian Culture-Based Continuum of Care System

Needs and Gaps: Need for Hawaiian Cultural Values & Visibility Across the Continuum of Care.

- The compelling and resounding need and gap area across the paeʻāina (archipelago) is the limited existence of intentional and systemic interweaving of Hawaiian culture-based practices and cultural values within substance use services from prevention to recovery. This lack of visibility is evident in various contexts. Yet, all seem to be rooted in a lack of awareness, knowledge, and/or understanding of the Native Hawaiian worldview and the negative impacts of historical, cultural, and intergenerational trauma on substance use and its broader effect on ola (wellbeing). Stakeholders describe and unpack a series of components to communicate what the absence of Hawaiian Culture-Based Visibility looks and sounds like in action.

Professional Development: Creating a Culture of Hawaiian Cultural Awareness

- The creation of a multi-pronged, long-term approach to shift mindsets and develop a set of common knowledge, understanding, and skills to acknowledge and amplify Native Hawaiian ways of knowing and being strongly emerged as an overarching solution to create a Hawaiian Culture-Based Continuum of Care System. Three main components materialized from stakeholders' manaʻo (thought, idea, belief) that identify the essential elements needed to create this future state.
- **People**: Engaging the entire substance use continuum of care community inclusive of lawmakers, decision-makers, service providers, etc. at all levels and touchpoints within the continuum of care
- **Process**: E hoʻi i ka piko E hoʻi i ka piko, meaning to return to the source, is a suite of strategies that will work together to normalize the Hawaiian worldview, practices, and approaches as a pathway towards healing. This process will include the following components:
    - **Elevating Homegrown Cultural Practitioners**: Providing career pathways and spaces for Native Hawaiian practitioners to secure professions at various levels within the substance use continuum of care. Expanding the

workforce of Native Hawaiian researchers and scholars to grow the knowledge base around culturally-grounded substance use services.

- **Recognizing the Value of Cultural Practitioners:** Cultural practitioners should not be forced to attain "state" certification in order to "qualify" or be "reimbursed" to provide healing through cultural approaches.
- **Cultural Awareness Training:** Provide cultural awareness training across the workforce of service providers to educate and inform about the negative impacts of historical, cultural, and intergenerational trauma on substance use and its broader effect on ola (wellbeing). Implement consistent and frequent culture-based training opportunities and support to move providers from knowledge to skill building to action.
- **Connection to 'Āina and Sense of Place:** Normalize and nurture an intimate and spiritual relationship with the land and significant places as an integral part of the healing experience

- **Product**: Implementing these elements in a continuous improvement process will create a Hawaiian Culture-Based Continuum of Care System over time.

Interventions (Re-imagined)

Re-envisioning a culturally responsive system of care first requires us to identify parallel strengths and potentially detrimental differences that form the existing colonized/western system's foundation.

Table 3 provides a side-by-side look at where western and Native Hawaiian healing practices can meet and work together to strengthen one another. Let us also look at risk and protective factors from a western and Native lens.

Table 3. Parallel Strengths of Western and Native Hawaiian Healing Practices.[10,47]

Western Healing Practices	Native Hawaiian Healing Practices
Focus on physical/psychological signs, symptoms, and causes	Focus on spiritual/interpersonal complaints and causes
Organic or psychological causal models	Causal models based on an imbalance in relationships/life roles
Treatment involves medicine, cognitive restructuring, and lifestyle changes	Treatment involves prayers, herbs, and repairing relationships
Evidence-based	Faith-based

Risks and (Protective) Factors

According to the State of Hawai'i Alcohol and Drug Abuse Division, some of the characteristics mentioned that could influence risk and/or resiliency to alcohol and drug abuse are: community environment living in (e.g., risks such as high unemployment, high prevalence of crime; e.g., protective factors include adequate housing, easy access to adequate social services) and family environment (e.g., risks include alcohol and other drug dependencies of a parent, abuse/neglect, lack of family values; e.g., protective factors include structured and nurturing family).

Risk and protection related to drug use for Native Hawaiian youth have also been described in the context of interrelated familial networks.[48] Qualitative methods,[48] explain how immediate and extended family members provided exposure to or protection from illicit substances in the home, school, and community. Research has suggested that family factors play a significant role in the substance use and resistance to substances of Native Hawaiian youth.[49,50] Compared to their non-Hawaiian counterparts, Hawaiian adolescents interacted significantly more with their family members[50] and received more family support,[51] suggesting that family plays an important and influential role in the lives of Native Hawaiian youth. In particular, respect for elderly family members (kūpuna) as sources of wisdom and carriers of the culture is an important characteristic within Native Hawaiian communities and an integral part of drug abuse rehabilitation.[52,53] These findings indicate the family-oriented value system (i.e., 'ohana system) that is pervasive within the Native Hawaiian culture.[54] Therefore, though multiple factors may influence the drug use of Native Hawaiian youth, family members seem to play a key role in the drug use and resistance for these youth.[55]

A study, *Community Risk and Resiliency Factors Related to Drug Use of Rural Native Hawaiian Youth: An Exploratory Story*, examined the risk and resiliency factors related to the drug use of Native Hawaiian youth residing in rural communities.[48] First, the influences of family, community, risk, and protection for youth in this study are intertwined and interactive processes.[48] Second, this study also emphasizes that familial networks are the foundation of community-based risk and resilience for rural Hawaiian youth.[48] Finally, this study helps to explain why research on culture, risk, and resiliency has demonstrated mixed findings.[56] When we take these risk and protective factors a step further to integrate the social and cultural determinants of the health model (Figure 3) developed by Dr. Keawe Kaholokula, a picture emerges.[57]

According to Dr. Kaholokula, the historical, sociopolitical, socioeconomic, environments, community, cultural, biological, and psychological determinants, all of which incorporate risk and protective or resiliency factors, contribute to a Native Hawaiian worldview of *Mauli Ola* (Health and Wellbeing).[57]

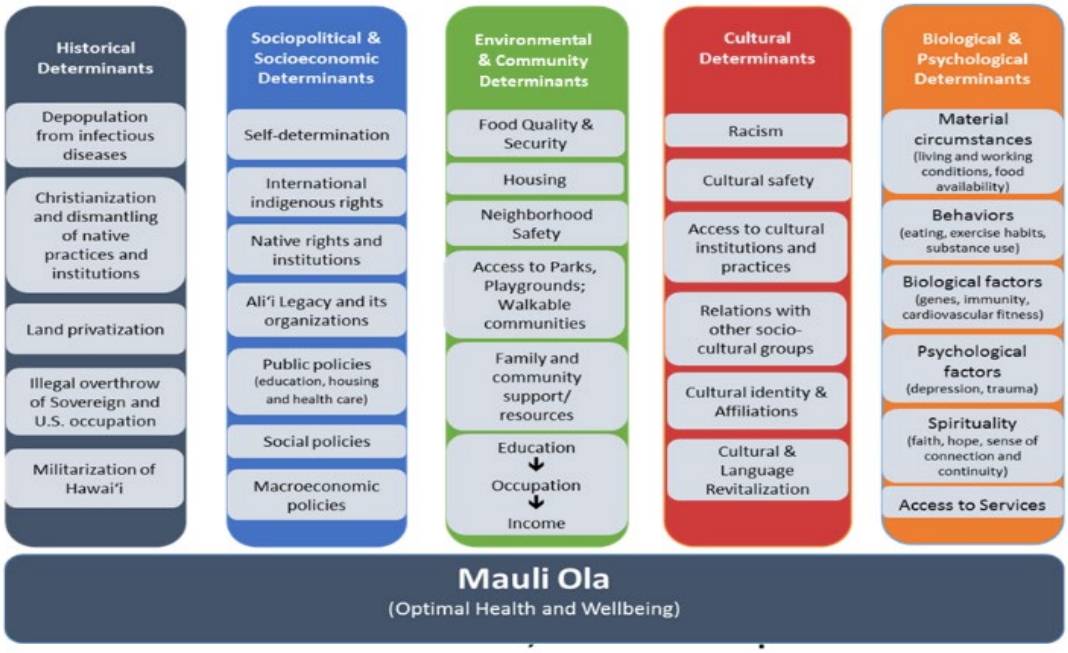

Figure 3. Social Determinants Model (adapted and printed with permission from Dr. Keaweʻaimoku Kaholokula[57])

Recent research indicates that re-envisioning treatment for the Native population, utilizing cultural reconnection and methodologies that speak to Native perspectives, is more influential in creating positive health outcomes for Native peoples.[58]

> ***"Native Hawaiians need a sense of place to anchor values and balance life. Beyond Western practices, Native Hawaiians need to care for the ʻāina, which they understand to deeply care for them. Native Hawaiians need the resiliency and protection that culture provides through language, traditions, and ceremonies, allowing ways to reconnect to ancestral knowledge and spirituality. Native Hawaiians need not become Western to heal."***[10]

According to Papa Ola Lōkahi and a Native Hawaiian Partnership, ʻImi Ke Ola Mau (a community collaboration Co-Occurring State Incentive Grant-COSIG), for Native Hawaiians to heal, "[They] need a sense of self, retrieved from our past through ancestors, present through purpose, and future through descendants. [They] need our language, traditions, and ceremonies, which provide ways to reconnect to our spirituality and the concept of our source. [They] need the resiliency and protection our culture provides, in order to prevent relapse and redefine ourselves away from pathological diagnoses."[59]

Cultural Perceptions of Self

Current care systems addressing substance use are rooted in historically colonized systems, centered in western approaches of individualistic care.[66] This individualistic and egocentric concept of the person can be contrasted with more sociocentric, ecocentric, or cosmocentric

views, which understand the person in relation to the social world, the environment, and the cosmos.[66] The collective vs. individual mindset within the Hawaiian worldview is dramatically different from Western approaches that are highly individualistic and often do not account for historical and cultural trauma that affects group consciousness. Individualism focuses on the unique individual.[64] Through this understanding of self, people are valued for how richly developed and articulated their inner sense of self is and how strong and coherent their self-direction is.[60]

However, the person's boundaries and understanding of the self are not identical in every culture. The same methods used to treat and heal cultures rooted in individualism can be harmful to those rooted in various other cultural configurations of the self, such as Indigenous cultures. Ignoring the self's internalized concept can leave the client with no way to reconcile their internal self-healing within the larger society's connective tissue, those social interactions that sustain the self within the community, and their collective healing.[60] Each categorical perception of self varies in the ways the self is defind;the values underpin and characterize a healthy perception of the ideal self, the understanding of one's role in specific actions or events, and associated healing systems.[60]

Native Hawaiians embrace the sociocentric, ecocentric, and cosmocentric perceptions of self. Sociocentric cultures typically define the self through family, clan, or community, and thus healing should involve and engage these entities. "The healing intervention thus affirms the person's connectedness and aims to repair or reorder relations with others."[60]

The ecocentric self, found among Indigenous peoples, relates the individual to the environment.[61] People understand themselves to be in constant transaction and exchange with animals and other living creatures as well as with the landscape. The notion of personhood encompasses nonhuman persons, including animals and the elements, which have their own perspectives, motives, and agency.[62,63](as cited in Kirmayer, 2007[60], p.245)

The cosmocentric self is defined by one's connection to the spirits and ancestors. "Systems of healing associated with such cosmocentric concepts of the person typically involve methods of divination to understand what has gone wrong with the individual's relationship with the gods and determine the appropriate actions to propitiate the gods and restore the cosmic order."[64](as cited in Kirmayer, 2007[60])

In response to a question about identity, egocentric persons might begin with a short version of their curriculum vitae, listing their own accomplishments at work or in public life. People-oriented toward a socio-centric view of the self would tend to respond by identifying their parents, family of origin, lineage, or community. An ecocentric notion of the person leads people to talk about their identity first in terms of place, while those with a cosmocentric sense of self and personhood will tend to narrate their identity in relation to ancestors, spirits, or larger cosmic or celestial forces.[60]

Each categorical perception of self varies in the ways the self is defined; the values underpin and characterize a healthy perception of the ideal self, the understanding of one's role in specific actions or events, and associated healing systems. [60]

Shifting to a Cyclical Continuum

On a traditional continuum of care, recovery is viewed as the phase after treatment. These individual areas can frequently become siloed, only concentrating on their specific prevention, treatment, or recovery areas. The depth of the recovery field often overlaps within the treatment area, as there are many pathways toward healing and recovery, and not all individuals in recovery have followed a path that involves clinical treatment.

The linkages between recovery and prevention lay in using one to inform the other through the feedback of successful outcomes, promoting mauli ola (well-being), and educating clients about making healthy, informed choices.[59] We have much to learn from those living their lives in recovery; they are our living, breathing, successful outcomes, and have much to teach us about what works and what does not for our kānaka (people/person). We can approach this shift toward a cyclical continuum through systems thinking as a way to see the phases along the continuum as interrelationships rather than as siloed components. This shift allows us to look for patterns of change rather than accepting static snapshots or defaulting to how it's always been.[65] From a culturally informed or holistic perspective, systems thinking can help us understand whether the purpose of the existing system is being accomplished and look for ways to create more equitable and resonating systems of care, thereby achieving better results with fewer resources in lasting ways.[65]

Keeping this cyclical nature in mind, we can move toward a Resiliency & Recovery-oriented care system where each phase informs one another, as seen in Figure 4 which spans the entire continuum of care.

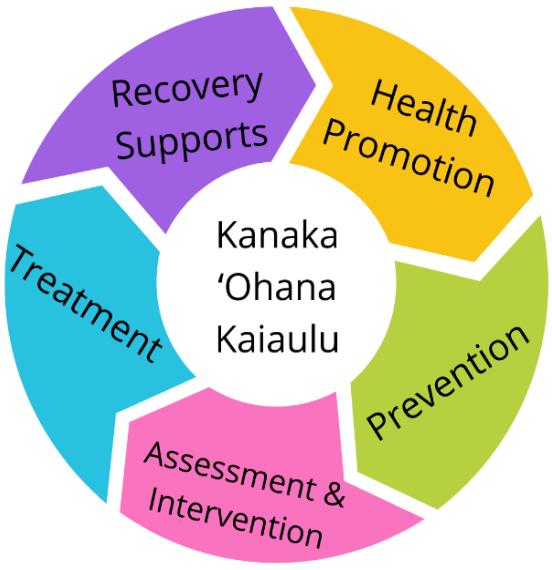

Figure 4. Kanaka ʻOhana Kaiaulu (Original unpublished figure created by the authors/Lilinoe Kauahikaua of Papa Ola Lōkahi, 2021)

At the center, the piko, we can see the depiction of self, of ʻohana, and community: three interrelated, interconnected healing targets. You cannot heal just one; all must be healthy for each to flourish. SAMHSA explains that resiliency- and recovery-oriented care system "is a coordinated network of community-based services and supports that is person-centered and builds on the strengths and resiliencies of individuals, families, and communities to achieve improved health and wellness outcomes for those at risk or experiencing issues with substance misuse."[66]

A recovery-oriented system of care (ROSC) supports the understanding that there are many pathways to recovery and healing. Native Hawaiian approaches to overcoming substance misuse

and embracing Mauli ola are more closely aligned with the values and approaches of resiliency & recovery-oriented systems of care (than existing care systems in Hawai‘i).

The Recovery Ready Ecosystems Model (RREM) provides a model to increase recovery prevalence and focus on supporting and building recovery-informed infrastructure within communities.[67] Collective healing of our communities is needed to combat intergenerational traumas that lead to stigma and NIMBYism (not in my backyard), which inhibit the healing of our Native people and their communities. The Recovery-informed infrastructure allows for a backward mapping approach to building a culturally resonant system, beginning with what is working. Recovery through an RREM lens encompasses the many pathways to healing, including harm reduction, behavioral/mental health, reentry, peer recovery services, diversion courts, and many more. It provides an emphasis on healing within the community, building recovery capital (resources connected to the individual human traits with which persons are born, the individual qualities that they have acquired over time, and the environmental and social structural spaces which they occupy in the world), and assessment of the recovery readiness of the community.[67] RREM provides an avenue of alignment with Indigenous, collective healing approaches.

An Indigenous approach to this community readiness assessment and evaluation is being developed and implemented by White Bison, a Native American operated 501(c)(3) non-profit company dedicated to creating and sustaining a grassroots Wellbriety Movement that provides culturally based healing to the next seven generations of Indigenous People,[68] in tribal communities across the North American Continent using a tri-ethnic model. They interview well-informed and respected members of the community to determine the readiness for change based on nine areas. Based on these readiness scores, they meet the community where they are, develop a visioning process, create a vision book, and determine what services and training would be most appropriate and beneficial for the community in their healing process.[69]

Another way to acknowledge, value, and uplift the Indigenous experience is through culturally grounded peer support. Peer support can only be provided by someone with lived experience and provides a layer of support, empathy, and understanding unparalleled by other clinical support. Peer recovery specialists can be invaluable for our Native people, who often struggle with Western recovery spaces and language. There are many ways one may obtain a peer certification, including federal certifications. Currently, the state only offers a peer certification for those with lived experience with both mental illness and substance use disorders. ADAD is currently developing a certification with International Certification & Reciprocity Consortium (IC & RC) for peer recovery specialists and updating its administrative rules by adding credentialing standards for peer specialists for substance use. Culturally grounded peer support services help address that dichotomy of individualism on the western spectrum, with a more collectivist or holistic approach toward healing, *ola*, and the well-being of the whole environment. Recovery for many may even take the place of clinical treatment. We must support these services with the same vigor and intent as the areas of promotion, prevention, and treatment. As an example, White Bison also provides mentorship and peer certification training through a bridged program both inside and outside of their jails and prisons through the Warrior Down Recovery program.

The development of culturally grounded recovery community organizations (RCO) across the pae‘āina (Hawaiian Archipelago) would provide safe spaces anchored in the community for collective healing. RCOs are independent, non-profit organizations led and governed by

representatives of local communities of recovery, primarily peers. RCOs organize recovery-focused policy advocacy activities, carry out recovery-focused community education and outreach programs, and/or provide peer-based recovery support services,[70] which can all be provided through a cultural lens. An overarching initiative to guide the cultivation of these RCOs, built through a culturally grounded framework, could extend its reach statewide, providing an ʻupena (net) across all services on each island, like an interconnected network. Ka Hale Pōmaikaʻi on Molokai is currently Hawaiʻi's only RCO.

Ahupuaʻa Model

Our Native people thrived in Hawaiʻi for centuries before Western contact. Native Hawaiians developed a complex resource management system through the ʻahupuaʻa system (Figure 5), a land division of interconnected systems stretching from the mountain to the sea.

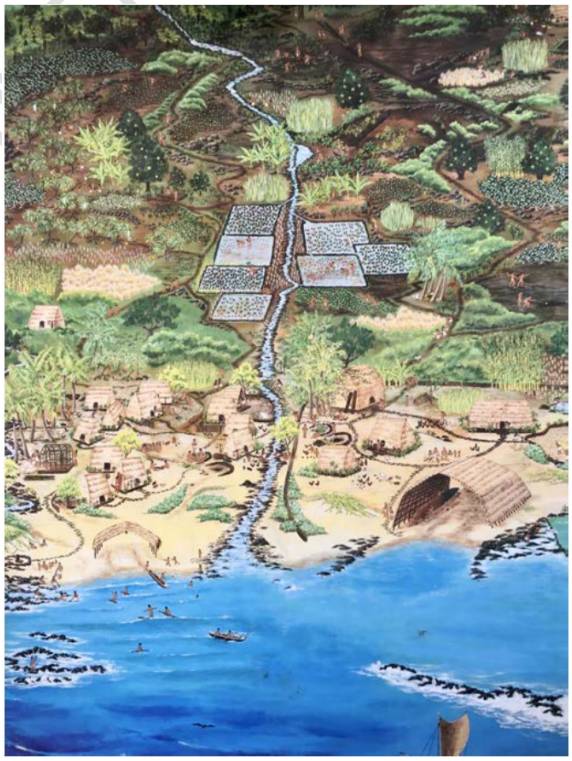

Figure 5. ʻAhupuaʻa. Credit: Kamehameha School.[71]

The ʻahupuaʻa model provides a framework to implement cultural interventions at various places within the ʻahupuaʻa to effectively provide healing that impacts not only the individual, but their ʻohana and community as well. Interventions within the metaphorical framework would aim to effectively decrease the intergenerational transmission of risk factors (intergenerational/historical/cultural trauma, colonization, poverty, oppression, loss of traditional healing practices, criminalization of Native identity, loss of land, family/community history of use/incarceration) and increase the intergenerational transmission of protective/resiliency factors (ʻohana relationships, cultural wisdom, traditional healing, community connection, moʻokūʻauhau (genealogy), ʻāina (land), respect for kupuna, and culture). The model draws from Dr. Keawe Kaholokula's model of the social and cultural determinants of health and their relation to Mauli Ola.[57] Our ʻahupuaʻa stretched ma uka i kai (mountain to sea), connected through wai (water), which flowed through each system section to bring life. Wai ran through our loʻi (kalo patch), and loko iʻa (fishponds), and down into the ocean, where it evaporates and becomes ua (rain) to once again fall from the lani (sky), run through our nāhele (forests), and down throughout the rest of the ʻahupuaʻa. No one system functioned independently. Kānaka, our people, tended these systems knowing that resources were finite and the land must flourish for us to survive. He aliʻi ka ʻāina, he kawa ke kānaka, the land is chief, and us its servant.[72]

Looking at the loʻi system, within our ʻahupuaʻa system, I ka wa kahiko (ancient times), if these systems were not functioning correctly, or not healthy, and if those who mālama (to take care of) these spaces were not maʻa (accustomed, used to, familiar) to this understanding, no one would

be fed. Lo‘i is the Native Hawaiian’s agricultural system using terraces along the hillsides. They developed complex systems, similar to water paddies, to grow their staple food of kalo (taro) along the valleys. We should understand the external impact on this substantive system.

We can understand kalo as a reflection of ourselves, of hāloa, our ancestor, our root, both metaphorically and physically. Let us conceptualize this new system of care, one where Native people can thrive and pursue healing pathways that embrace, empower, and value an Indigenous worldview. We achieve this by recognizing interconnections within systems and understanding how feedback from each area along the continuum of care impacts and informs other system areas as a whole, much like the ‘ahupua‘a.

As we visualize the system through this culturally informed and holistic lens, we must also acknowledge that current data often aggregates ethnicities, is disparity focused and has a history of portraying Native/Indigenous populations by showing what is wrong. Therefore, the ‘ahupua‘a model[71] provides a metaphorical model to understand collective healing through a Native lens and embraces a recovery perspective that recognizes substance use as a symptom of a larger trauma. The ‘ahupua‘a is a living, breathing example of a thriving, healthy Native system.

Through this model, practitioners can identify the root causes of trauma, and develop effective culturally informed interventions to engage in collective healing from trauma and celebrate resiliency outcomes. With the help of our Indigenous cousins, we continue to explore the manifestations of deeper trauma within ourselves, ‘ohana, and communities through this model of a Healing ‘Ahupua‘a, inspired by the Healing Forest model created by White Bison.[73,74]

Pre-contact, our ‘ahupua‘a were healthy and existed in a harmonious relationship, tended by kānaka (Native people) whounderstood that each interconnected system within the ‘ahupua‘a must be healthy for all to thrive.

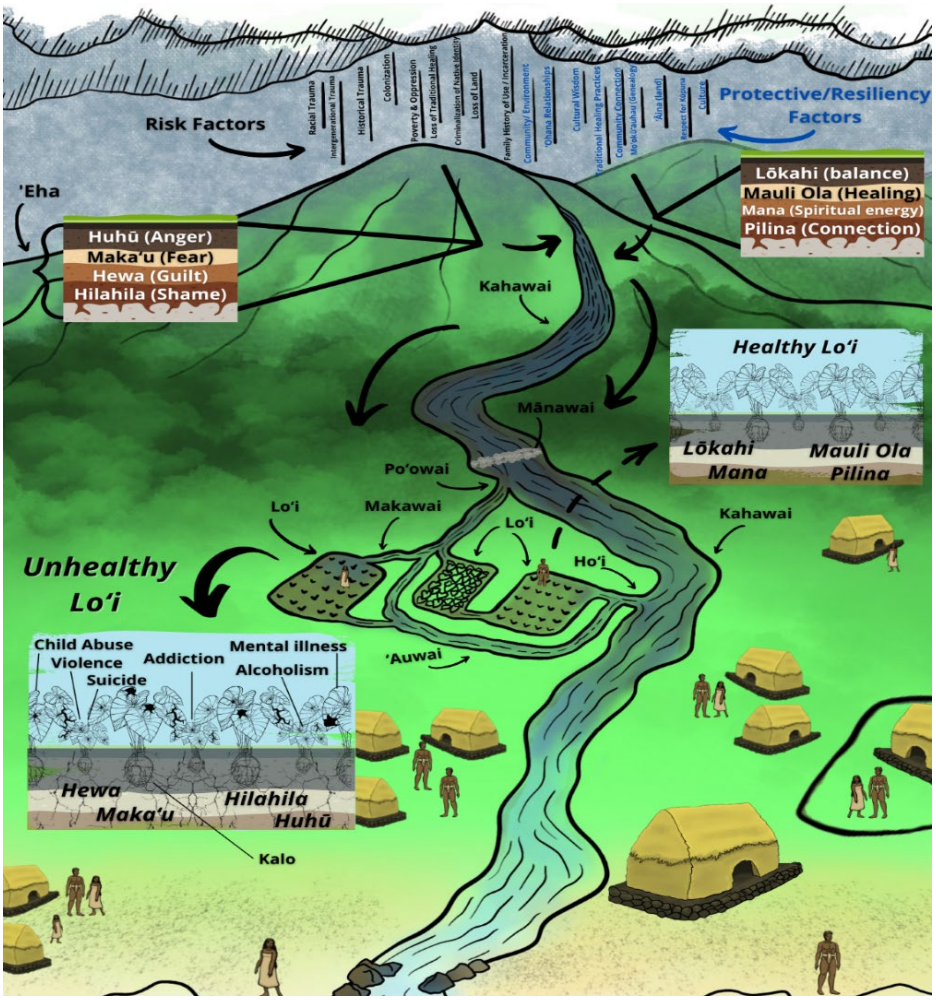

Figure 6. The Impacts of Colonization on ʻAhupuaʻa. Conceptualization by Lilinoe Kauahikaua and Papa Ola Lōkahi V2.0. Original Unpublished figure created by Kimo Apaka and edited by the authors and duplicated with copyright permission 2021.[74]

However, Figure 6[74] outlines the impacts of colonization, racial/cultural traumas, negative socio-economic impact, the criminalization, and subsequent loss of the Native identity has had on Native Hawaiian individuals, ʻohana, and communities. These impacts are carried through the ʻahupuaʻa system as risk factors impacting generations.

Let's visualize these risk factors entering our ʻahupuaʻa through the ua or rain. This ʻeha, or pain/trauma, is passed down from generation to generation and compounded by unresolved grief. All of this ʻeha creates layers of huhū (anger), hewa (guilt), hilahila (shame), and makaʻu (fear), which enter into our ʻahupuaʻa just as the metaphorical rain feeds into the soil. Suppose we look at these impacted systems and visualize the ʻeha (pain/trauma) impacting the soil to understand the pollution and other toxins that have found their way into our environment and continue to impact our systems through the environmental water cycle cyclically. The potentially unhealthy/impacted soil would then run off into the kahawai (river) and be carried downstream, impacting the rest of our interconnected systems. But, just as trauma is passed down generationally, our ancestors pass down the strengths and resilience (as seen in the ua).

We can understand the interconnected ʻahupuaʻa systems as our care systems, our ʻohana, and our communities. In understanding care systems and approaches to healing within the larger continuum, let us focus on the loʻi as an ʻāina-based model to visualize the internal and external impacts of trauma and the manifesting symptom of substance use on our lāhui ecosystem. Loʻi is the Native Hawaiian's agricultural system using terraces along the hillsides. They developed complex systems, similar to water paddies, to grow their staple food of kalo (taro) along the valleys. We should understand the external impact on this substantive system. As the unhealthy soil enters into our loʻi, it becomes that which feeds the next generation of kalo or hāloa that emerges from it.

Today, we may have generations of people born with all of this internal ʻeha buried deep within them. If the ʻeha begins to bubble up to the surface, it can manifest in many different ways in our kalo; anger, violence, substance use, etc., giving way to an unhealthy ʻahupuaʻa. However, suppose we remember that our strengths and cultural resilience are also contained in the ua and soil. In that case, we see a path forward in cleaning our water of the risk factors to improve and increase our protective/resilience factors for generations to come.

Let us imagine, while working in the loʻi one day, we find one kalo that is sick (manifesting trauma as addiction). First, we must look around to the other kalo to find the source of the sickness. Are the other kalo sick? Is the whole loʻi sick? How could this sickness be getting in? We must look up the interconnected ʻauwai (canal) and the kahawai for the source of this sickness, this pollution, this ʻeha. If we cannot find the source of this maʻi, this sickness, and we instead decide we will just take that one kalo out, heal it, and then put it back into that potentially unhealthy environment, it will only get sick again.

This metaphor illustrates we will face the same result we began with if we decide to solve the problem on the surface that we see. We need to put in the work to address the root of the problem, look far enough up the system, and dig deep enough to find the source that creates the unhealthy environment.

Recognizing how Native Hawaiians experience the self through ecocentric, cosmocentric, and sociocentric definitions provides a lens for understanding and developing more impactful and effective interactions for Native people are implemented throught the ʻahupuaʻa framework. Thereby the ʻahupuaʻa model provides a framework to implement cultural interventions at various places within the ʻahupuaʻa to effectively provide healing that impacts not only the individual, but their *ʻohana* and community as well. Interventions within the metaphorical framework would aim to effectively decrease the intergenerational transmission of risk factors (intergenerational/historical/cultural trauma, colonization, poverty, oppression, loss of traditional healing practices, criminalization of Native identity, loss of land, family/community history of use/incarceration) and increase the intergenerational transmission of protective/resiliency factors (ʻohana relationships, cultural wisdom, traditional healing, community connection, moʻokūʻauhau (genealogy), ʻāina (land), respect for kupuna, and culture), cleaning our wai as it traverses throughout our interconnected systems and is reborn through the water cycle to fall as ua once again, reducing risk factors and increasing protective factors. This increase in protective factors will contribute to the healthy loʻi and ʻahupuaʻa through the soil waiwai (rich) with lōkahi (balance), mauli ola (health), mana (spiritual energy), and pilina (connection/bonds), foundational values for a thriving lāhui kānaka (Native Hawaiian people), as

seen on the right side of the image. (Figure 3)[74] The ‘ahupua‘a conceptual framework is intended to develop and grow as the framework is embraced and actualized across systems and care spaces.

Embracing a more culturally grounded approach would effectively provide a paradigm shift in how society and individuals see themselves. Imagine the empowerment of nurturing and uplifting these unique gifts contained within Native Hawaiian protective/resiliency factors and the impact or effect they would have on someone’s life, how they grew up, and how they perceive themselves. By understanding the multiple threads impacting their lives, a more robust, comprehensive (holistic) approach that incorporates (blends) the interventions used will have more value for this Native person.

Recommendations

The following recommendations are proposed to guide the initial steps toward implementation of a newly conceptualized system. These recommendations were based on the synthesis of the existing literature and available data, but also Indigenous knowledge and feedback from our stakeholder groups.

Infrastructure Development

1. ***Reporting Standards***
    - Create a network within Native Hawaiian communities across the State to increase engagement capacity (accountability and ongoing feedback loop)
2. ***Inter-Agency***
    - With other State departments, develop a cross-discipline group to focus on creating inter-agency engagement strategies (protocols) and outcomes (procedures) (i.e., specialty cultural court)
    - Identify areas that language and processes can be updated to shift the narrative and create a more inclusive space for integrating Native Hawaiian values and beliefs
3. ***Peer Support***
    - Value and uplift lived experience
    - Develop culturally grounded, resonant, inclusive, and supportive peer spaces for Indigenous people on their healing journey from substance use. Create reimbursement pathways for care systems employing peers
    - Involve Native Hawaiian organizations and community as the state structures the credentialing and training process
        - To allow outside organizations to provide and structure training
        - To add cultural safety component to existing credentials
4. ***Culture Court***
    - Recommended by House Concurrent Resolution (HCR) 85 Task Force in 2018
    - Provide cultural healing pathways as Native people interact with the system
    - Diversion will help to reduce re-engagement with the criminal justice system and reduce relapse.

5. *Indigenous Workforce Development*

- Cultural "Safety" Training
- Engaging the entire substance use continuum of care community inclusive of lawmakers, decision-makers, service providers, etc. at all levels and touchpoints within the continuum of care
- Elevating Homegrown Cultural Practitioners: Providing career pathways and spaces for Native Hawaiian practitioners to secure professions at various levels within the substance use continuum of care. Expanding the workforce of Native Hawaiian researchers and scholars to grow the knowledge base around
- Cultural Awareness Training: Provide cultural awareness training across the workforce of service providers to educate and inform about the negative impacts of historical, cultural, and intergenerational trauma on substance use and its broader effect on *ola* (wellbeing). Implement consistent and frequent culture-based training opportunities and support to move providers from knowledge to skill building to action
- Connection to ʻĀina and Sense of Place: Normalize and nurture an intimate and spiritual relationship with the land and significant places as an integral part of the healing experience

6. *Recovery Community Organizations*

- Integration of RROSC & Recovery Ready Communities models with cultural alignment and awareness

7. *Evaluation*

- Re-explore "approved" western modalities and assessment tools like the ASAM or CBT in including cultural alignment
- Develop cultural evaluation & assessment tools

Data Collection & Disaggregation

- Addressing the need for data sovereignty that allows for Native Hawaiians to develop data that is collected for, by, and about us
- Create mechanisms that identify culturally relevant data collection
- Develop culturally anchored evaluation tools that state-funded treatment programs use related to the efficacy of programming specific to Native Hawaiians

Funding & Monitoring/Oversight

1. *Funding*

- Federal dollars that are sought after and awarded to the State of Hawaiʻi be tracked when Native Hawaiians (and or other marginalized groups indicated on request for proposal) are targeted along with a clear plan for accountability and meaningfulness of programming
- Analyze spending on Native Hawaiian programs throughout the department
- Create a policy oversight position to develop criteria and monitor for cultural adherence
- Provide additional support for "promising practices" throughout the continuum of care

- Funding culturally grounded evaluation to gather the necessary foundation for referral approval

2. ***Advisory Council:***
    - Federal dollars that are sought after and awarded to the State of Hawai‘i be tracked when Native Hawaiians Establish a council of relevant partners (providers, government, stakeholders) to monitor compliance and review accountability of funds and programming related to Native Hawaiians. Convene a group of Native Hawaiian health and well-being specialists from across the state to provide feedback and guidance on the process of funding.

Conclusion

Options such as culture court, a recommendation put forth by The HCR 85 Taskforce in 2018, would provide cultural healing pathways as Native People interact with the system. Pathways of diversion and healing will help eliminate re-engagement with the criminal justice system and reduce relapse through cultural reclamation. Indigenous cultural “safety” training aimed at providing insight into historical, cultural, and intergenerational experiences of Hawai‘i’s Indigenous population is a concept that should be mandated for all those working with Native Hawaiians and Pacific Islander peoples and communities. Peer recovery specialists can be an invaluable resource for our Native people. However, as this certification is being developed, we ask for the involvement of Native Hawaiian organizations and community, as the state structures the credentialing and training process to allow for outside organizations to provide and structure training, as well as add a cultural safety component to existing certifications in the field. This is an opportunity for an organization to build a culturally grounded program certification curriculum. This culturally grounded certification would allow for the development and cultivation of peer navigators. The curriculum could be provided on both a community and collegiate level, as well as offered within our correctional facilities. Our pa‘ahao (incarcerated persons) could be provided the opportunity to obtain this certification before release, helping them to gain employment upon reintegration into the community.

We can also develop culturally grounded RCO across the pae‘āina. RCOs are “independent, non-profit organizations led and governed by representatives of local communities of recovery, primarily peers. RCOs organize recovery-focused policy advocacy activities, carry out recovery-focused community education and outreach programs, and/or provide peer-based recovery support services,”[70] which can all be provided through a cultural lens. An overarching initiative to guide the cultivation of these RCOs, built through a culturally grounded framework, could extend its reach statewide, providing an ‘upena (net) across all services on each island, like an interconnected network. We could also begin to re-envision recovery-oriented systems of care and bridge prevention and recovery through this cultural lens through these services. Ka Hale Pōmaika‘i and Mālama Project in Hawaio‘i implements a culturally grounded and recovery-oriented system of care.

Current culturally grounded interventions have struggled for some time to meet the requirements for evidence-based interventions and assessments required by Request for Proposals (RFPs) and Grant applications. These methods often do not align with culturally grounded intervention

programs which tend to be more fluid in approach as each intervention is tailored to the individual and family. It is also impractical to assess the successive impact of cultural interventions through standard western assessment. To support the existing and future development of culturally grounded interventions, ADAD should provide additional support for "promising practices" throughout the continuum of care. This support should include providing and funding culturally grounded evaluation to gather the necessary foundation for referral approval. Additional ideas include requiring the approval of an advisory or Kupuna council for all culturally grounded interventions. According to the current western definition of evidence-based interventions,[24,25] they are practices or programs with peer-reviewed, documented empirical evidence of effectiveness. But what does this mean for culturally grounded interventions? The current western dominant paradigm of evidence base prioritizes research, peer review, and randomized controlled trials. However, we cannot continue to adhere to this western dominant paradigm, which heavily bases itself on the assumption that research in the social sciences is essentially the same as natural sciences.[25]

Western research looks for themes formulated together to produce "laws" or one size fits all, blanket approaches to social issues.[24] "This way of understanding people and their struggles has become dominant in a very particular economic and cultural milieu, one that, despite the forces of globalization, is alien to many communities around the world. Its materialist and individualist focus means that it is often a specifically inappropriate vehicle to use with Indigenous communities."[26] A newly conceptualized journey of healing for Native Hawaiians should utilize and uplift stories of resilience to resonate with, inform, educate, and empower those impacted, those who help navigate these systems, and those who choose to walk alongside the healing journey. Therefore, our recommended approach is centered around healing the ʻahupuaʻa system through culturally grounded programs that allow for tailored interventions that meet the specific needs of individuals and families living within the healthy, thriving ʻahupuaʻa system.

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FAMILY SERVICES

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Systems of Care Implications in Hawai‘i: Sexual and Gender Minorities

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Abstract

Sexual and gender minorities (SGM) are diverse groups of people who do not identify as heterosexual or cisgender. SGM communities include Lesbian, Gay, Bisexual, and Transgender (LGBT) individuals as well as people of other sexual orientations and gender identities. Although the SGM population is not monolithic, there are commonalities that are useful for the purposes of systems-level health interventions. SGM communities are disproportionately affected by substance use disorders, with differential use of specific substances among persons based on sexual or gender identity. As understood through the minority stress model, substance use and misuse among SGM people are tied to risk and resiliency factors at all levels of the social ecological paradigm, from individuals to interpersonal to communities and societies. Despite the disproportionate burden of substance use disorders on SGM people in

Hawai'i, very few resources or programs exist to ameliorate the impact of substance use on this community. Although some models of care could be useful for SGM people, community-specific interventions are scarce, especially for Hawai'i. To successfully meet the needs of SGM people in Hawai'i, multi-level transformation of the substance use prevention and treatment landscape must address: culturally appropriate service delivery; workforce recruitment and development; nimble and adequate financing; consistent data collection and reporting; and systems-level policy updates.

Background & Introduction

Sexual and gender minorities (SGM) are people that do not identify as heterosexual or cisgender. SGM can be considered to be more inclusive than Lesbian, Gay, Bisexual, and Transgender (LGBT) because it encompasses those who identify with other sexual orientations (e.g., asexual, aromantic, queer, and pansexual) and gender identities (e.g., agender, gender non-conforming, and gender non-binary). SGM communities are diverse and not monolithic. Although intersectional factors (e.g., race, class, geography) and individual lived experience impact SGM people, the scope of this paper discusses broad considerations for this community. Individuals in these underprivileged communities have reported elevated rates of substance use-related issues both nationally and locally in Hawai'i. In the present paper, the authors examine substance use disparities between SGM and heterosexual/cisgender individuals, theory related to these disparities, and intervention strategies to address the issues that the SGM communities of Hawai'i face.

Substance Use Disparities

Substance use and probable substance use disorders disproportionately affect SGM communities across the United States.[1,2] The disproportion compared to the heterosexual/cisgender population has been described in the studies on various substances including but not limited to tobacco,[3-7] alcohol,[8-10] marijuana,[9] opioid,[11,12] and polysubstance.[13] The prevalence of substance use also has been studied among the SGM subgroups[14-16] and by intersecting groups between sexual orientation and gender identities and demographic characteristics such as age[17,18] and ethnicity.[19]

In Hawai'i, substance use disparities are evident among both youth and adults who identify as SGM.[20,21] Lesbian and gay identified individuals in Hawai'i were at higher risk for methamphetamine dependence than their heterosexual and bisexual counterparts.[22] Bisexual individuals were more likely to have a dependence to marijuana, alcohol, and pain relievers than their heterosexual and lesbian and gay counterparts.[22] Transgender and gender nonconforming youth in Hawai'i were also at a higher likelihood than their cisgender counterparts to have a probable substance use disorder.[22]

Table 1 breaks down select substances by sexual orientation. Table 2 details data from the Youth Behavior Risk Survey on alcohol use, marijuana use and electronic and combustible cigarette use. Bisexual individuals are also at higher risk for current substance use than their heterosexual and lesbian or gay counterparts. Lesbian or gay individuals are also more likely than heterosexual people to be currently using any substance. Lesbian and gay youth use more tobacco and methamphetamine, but less alcohol and marijuana compared to both bisexual and heterosexual youth. Table 3 outlines the need for more treatment resources for substance use disorders focused on transgender and gender

nonconforming youth. Table 4 shows current (past 30 day) substance use disparities affecting transgender and gender nonconforming youth when compared to their cisgender counterparts.

Table 1. Proportion of past-month substance use among lesbian, gay, bisexual, and heterosexual individuals (aged 12 and above) in Hawai'i between 2015-2018

	Lesbian/Gay		Bisexual		Heterosexual	
	%	Est. N	Est. N	Est. N	Est. N	Est. N
Tobacco	32.3%	8,000	29.0%	10,000	18.0%	170,000
Methamphetamine	4.0%	1,000	2.4%	1,000	0.7%	7,000
Alcohol	44.5%	11,000	62.5%	22,000	48.3%	458,000
Marijuana	8.0%	2,000	21.4%	8,000	9.4%	89,000
Cocaine	C.S.	C.S.	2.2%	1,000	1.0%	10,000
Opioids	C.S.	C.S.	6.5%	2,000	1.0%	9,000
Pain Relievers	C.S.	C.S.	6.5%	2,000	1.0%	9,000
Tranquilizers	C.S.	C.S.	2.5%	1,000	0.4%	4,000
Stimulants	C.S.	C.S.	2.4%	1,000	0.4%	3,000

Source: Talagi D, Topinio JB, Yasuda SM, Bohol RY, Nicolow J, Pu'uohau T, Do B, Wu YY, Lee T, Valera J, Yurow J, Aiona A, Mersereau E, Fan VY. *Hawai'i Behavioral Health Dashboard: National Survey on Drug Use and Health Substance Use Dashboard*. University of Hawai'i at Mānoa, Pacific Health Analytics Collaborative. Retrieved June 28, 2021. http://www.hawaii.edu/testaging/dashboard/responsive/responsive-index.html#pageDash.[22]

Table 2. Proportion of substance use among lesbian, gay, bisexual, and heterosexual high school students in Hawai'i in 2019

	Lesbian/Gay		Bisexual		Heterosexual	
	%	Est. N	Est. N	Est. N	Est. N	Est. N
Alcohol - Current Use	24.2%	131	31.3%	382	19.7%	4,441
Alcohol - Binge Drinking	11.0%	140	16.2%	404	10.3%	4,609
Marijuana	14.9%	147	21.4%	416	16.9%	4,658
Cigarettes-Combustible	8.4%	153	9.9%	424	4.1%	5.743
Cigarettes-Electronic	23.8%	135	34.2%	402	31.2%	4,512
Cigarettes- Combustible Daily Use	2.3%	153	0.8%	424	1.2%	4,794
Cigarettes - Electronic Daily Use	13.2%	135	5.8%	402	8.0%	4,512

Source: Centers for Disease Control and Prevention (CDC). 1991-2019 High School Youth Risk Behavior Survey Data. Accessed on June 28, 2021. http://nccd.cdc.gov/youthonline/.[23]

Table 3. Probable Substance Use Disorder as Determined by Self-Administered CRAFFT Screener by Gender

	Negative Risk (Score 0-1)		Positive Risk (Score 2-3)		Probable SUD (Score 4+)	
	%	95%	%	95%	%	95%
Overall	74.6	(72.6,76.6)	14.3	(12.3,16.3)	11.1	(9.1,13.1)
Female	74.6	(76.6,72.6)	14.3	(12.3,16.3)	11.1	(9.1, 13.1)
Male	69.8	(67.8,71.8)	17.1	(15.1,19.1)	13.1	(11.1,15.1)
Transgender/Gender Non-Conforming	79.3	(77.3,81.3)	11.8	(9.8, 13.8)	8.8	(6.94,10.8)

Source: Onoye, J., Miao, T., Goebert, D., Thompson, M., Helm, S., Akamu, C., Gomes, I., Terakubo, J., Salvador, M., Alejo, L., Kuniyoshi, E. (2021). "2019-2020 Hawai'i Student Alcohol, Tobacco, and Other Drug (ATOD) Survey: Statewide Report." Sponsored by State of Hawai'i Department of Health, Alcohol and Drug Abuse Division ASO Log #19-238. Honolulu, HI.[24]

Table 4. Current Substance Use Amongst Transgender and Gender Non-Conforming Middle and High School Students in Hawai'i

	Past 30 Day Substance Use	
	%	95% CI
Alcohol		
Overall	27.3	(25.3, 29.3)
Female	31.1	(29.1, 33.1)
Male	23.6	(21.6, 25.6)
Transgender/Gender Non-Conforming	37.4	(35.4, 39.4)
Cigarettes		
Overall	8.4	(6.4, 10.4)
Female	8.4	(6.4, 10.4)
Male	7.6	(5.6, 9.6)
Transgender/Gender Non-Conforming	30.2	(28.2, 32.2)
E cigarettes		
Overall	25.9	(23.9, 27.9)
Female	29.7	(27.7, 31.7)
Male	22.3	(20.3, 24.3)
Transgender/Gender Non-Conforming	35.4	(33.4, 37.4)
Marijuana		
Overall	20.3	(18.3, 22.3)
Female	22.3	(20.3, 24.3)
Male	17.7	(15.7, 19.7)
Transgender/Gender Non-Conforming	42	(40.8, 44.0)

Source: Onoye, J., Miao, T., Goebert, D., Thompson, M., Helm, S., Akamu, C., Gomes, I., Terakubo, J., Salvador, M., Alejo, L., Kuniyoshi, E. (2021). "2019-2020 Hawai'i Student Alcohol, Tobacco, and Other Drug (ATOD) Survey: Statewide Report." Sponsored by State of Hawai'i Department of Health, Alcohol and Drug Abuse Division ASO Log #19-238. Honolulu, HI.[24]

Risk and Protective Factors

The social-ecological model[25] of health is a tiered framework that approaches health risk from a holistic approach. It theorizes that an individual's health conditions are the result of many factors including individual, interpersonal, communal, and societal levels of impact. This conceptual framework is useful for understanding and mapping the various risk and protective factors that affect a person's health and can then be applied to tailor health interventions at various levels of the social-ecological model.

Individual level

The individual level of the social-ecological model considers how a person's biological conditions and internalized beliefs affect behavior. SGM individuals have unique stressors that can influence their health behaviors. Internalized cis/hetero normativity and trans/homo negativity are the internalized beliefs that heterosexual and cisgender identities are of the norm and that deviations from the norm are wrong or immoral. These feelings can be ingrained through anti-LGB bullying, messaging, and generalized hatred.[26] Additionally, other aspects of one's identity (e.g. race, ethnicity, disability status, etc.) can serve as additional risk or protective factors.[27-33] Although some may disagree,[34,35] these negative internalized beliefs have been associated with a variety of mental health concerns, including substance use related issues.[34-38]

In addition to internalized stigma, identity uncertainty has been associated with elevated substance use in many SGM identity groups.[39,40] However, the role that identity uncertainty plays as a risk factor along with its converse of identity acceptance and outness as a protective factor, is not identical across the entire SGM community.[16,37,41-43]

Sexual and gender minorities are more likely to have multiple mental health diagnoses including depression and anxiety, both of which are more likely to increase the likelihood of substance use.[37,44] Furthermore, the role mental health (specifically trauma[45]) plays in seeking and maintaining care is still under contention. An individual's traumatic experiences and their mental health can affect their likelihood of using and becoming dependent upon substances.[44]

Interpersonal level

The recent shift in public opinion towards accepting SGM individuals[46-48] has led to more people becoming comfortable with disclosing their sexual orientation and gender identification. While SGM youth are coming out at an earlier age, while anti-LGBT bullying incidents have increased significantly.[47,48] Furthermore, recent polling data estimates that around 5.3% of the United States population identifies as LGBT, with 15.3% of Generation Z (born between 1995-2002) identifying as LGBT.[49] In Hawai'i, 17.9% of public high school students identify as sexual and gender minorities, with the following identities represented: gay or lesbian (3.3%), bisexual (7.4%), transgender (2.4%).[50-52] Among Hawai'i adults, 5.3% identify as sexual and gender minorities, with the following identities represented: gay or lesbian (2.0%), bisexual (1.8%), transgender (0.7%).[53-55]

Homophobic bullying in schools remains a significant problem in Hawai'i and the United States. In Hawai'i, 15.2% of LGB and 29.7% of transgender students do not feel safe at school.[56] Anti-LGBT

bullying is correlated to heavier and more frequent substance use.[57-59] Transgender youth who have experienced enacted stigma have higher odds of substance use.[60] Additionally, students who are questioning their sexual orientation have been found to have the highest rates of harassment.[61]

Homelessness amongst LGBQ youth is high. A study in Houston found that nearly one-quarter of homeless adolescents may experience higher victimization rates, traumatic events, and substance use.[10] Some other studies describe the substance use among the homeless youth as following:

- There was a high incidence of substance use, especially tobacco use (89%), marijuana (87%), and binge drinking (52.4%)[62];
- Bisexual youth were more likely to be homeless than other LGQ youth and suffer from higher rates of depression while not seeking help[62]; and
- LGB youth experiencing homelessness were more likely to experience physical abuse, parental drug use, trading sex[63]

Communal level

The communal level of the social-ecological model relates to stressors that are present in the community or at institutions and organizations, such as government, school, and work. Institutional policies that prevent harassment and bullying are associated with lower risk for substance use in SGM individuals who benefit from such policies.[12,57-59,64] Schools have been extensively studied for their influence on youth substance use. For example, schools that have active Gay-Straight Alliances (GSAs), anti-bullying policies, and student support mechanisms have shown a significant reduction in substance use amongst SGM students.[64,65] Furthermore, supportive schools have shown reductions in heavy episodic drinking (HED) during high school and into adulthood[12,57,58]; and they have demonstrated a significant reduction in cigarette smoking.[66]

Schools that can provide adult mentors (either formally or informally) have students with lower rates of marijuana use amongst their SGM population.[12,57,58] Participation in athletic programs has also been shown to reduce cigarette use in SM boys but had no significant effect in SM women.[67,68] It should also be noted that bisexual students face unique stressors (including discrimination/microaggression from LG and Straight identifying people) than their lesbian and gay counterparts, which still needs to be addressed in the academic realm.[12,69,70]

Healthcare protections for SGM individuals like changes to gender inclusive language and facilities are both associated with better outcomes for SGM patients and the likelihood for care retention.[71] LGBT spaces also offer some protection for SGM people because they are spaces for and by the community. The tobacco industry has been well documented to target gay spaces with advertising campaigns that support social equality campaigns, which yielded favorable perceptions among the LGBT community.[16,37,72,73]

Although LGBT spaces provide an affirming environment for SGM individuals, participation in gay-related activities during adolescents can lead to higher levels of alcohol misuse; however, the authors of this study also note that this decreases as youth ages.[74,75] It should still be noted that identity affirmation and association into LGBT spaces could still serve as a protective factor even if there are some mixed influences due to permissiveness of substance use.[40] Additionally, affinity

to the gay community has been linked to being more permissive to substance use in SM youth,[37] but this could also be due to other external factors like years of marginalization.

Societal level

The societal level of the social-ecological model explores health, occupational, educational, economic, and social policies; social and political climate; and social and cultural norms. For example, discriminatory SGM policies and feelings of "living in a predominantly hetero world" were found to be related to increased substance use.[66] Conversely, SGM youth were less likely to binge drink in states that adopted progressive SGM-related policies.[76] In school settings, school-based supports were found to be related to fewer experiences of victimization and better academic outcomes. Societal level policies and culture are also associated with SGM health behaviors.

Minority Stress Model: Multi-Level Impact

The minority stress model posits that minority individuals experience discrimination, stigma, and prejudice (on every level of the social-ecological model), and that there are unique stressors that can affect SGM people.[77-79] SGM individuals may experience both non-SGM related (e.g., race) and SGM-related stigma,[80,81] which may lead to mental health problems and maladaptive coping strategies including substance use.[39,80-84] Importantly, this model also highlights SGM-specific factors (e.g., community support, identity pride) that promote resiliency and mitigate the effects of minority stress. The minority stress model is the most predominantly used model and provides a starting point to identify resiliency factors to promote, stressors to prevent, and treat resulting distress.

The minority stress theory is a conceptual model that aims to contextualize the unique stressors experienced by marginalized populations. Stressors include both micro and macro-level events from distasteful comments and microaggressions to discriminatory policies and actions. Gender minority stress theory[85] and sexual minority stress theory[79] are theoretical frameworks that encompass the many possible negative life events and stressors that are experienced by gender and sexual minority people, respectively. Stressors include discrimination, stigmatization, internalized homonegativity or cisnormativity, and concealment of sexual or gender identity. Gender dysphoria has been considered an additional minority stress factor for gender minority individuals.[86] These stressors can transcend the social-ecological model's various levels because discriminatory policies have the power to inform opinions and negative social interactions, which can be internalized by sexual and gender minorities. SGM people can experience minority stress from factors including their sexual and gender identity in addition to other marginalized identities such as race/ethnicity, income/wealth, occupation and occupational status, education, amongst others. People who are a part of multiple marginalized groups can experience minority stress due to all of these factors separately or combined.[87]

Discrimination and Stigmatization

Discrimination and stigma have been associated with negative mental health outcomes like suicide ideation and a greater likelihood of substance use among SGM people.[37,84] While anti-LGBT discrimination is more likely to affect any SGM individual, it is more likely to affect sexual

minorities that do not identify as a gay-male or lesbian-female.[11,39,82,83] Furthermore, experiencing discrimination has been linked to alcohol, tobacco, and drug use disorders.[11,39,83,88]

Furthermore, stigma refers to "the negative social attitude attached to a characteristic of an individual that may be regarded as a mental, physical, or social deficiency."[89] SGM people are at increased risk for experiencing stigmatization.[90] Transgender men are at high risk for experiencing stigmatization, especially in health care settings compared to cisgender men. Ten percent of transgender men have experienced healthcare refusal related to their transgender status.[91] These experiences can lead to distrust of the healthcare system and are associated with substance use.[90,91]

Interventions at the normative levels have shown mixed results on communities that are constantly at odds with social norms, like sexual and gender minorities. For example, smoking interventions, through laws and regulations against smoking in public, has reduced overall smoking rates. However, this has not changed the rates of smoking amongst gender and sexual minorities. Social norms could reduce self-efficacy and increase self-segregation among SGM smokers, keeping smoking rates high among this community.[92]

Systems of Care

Cycle of Care System Framework

To discuss systems of SUD care in Hawai'i, Rhode Island's cascade of care provides a basis for a cyclical framework that conceptualizes SUD treatment as five different stages.[93] See Figure 1 below.

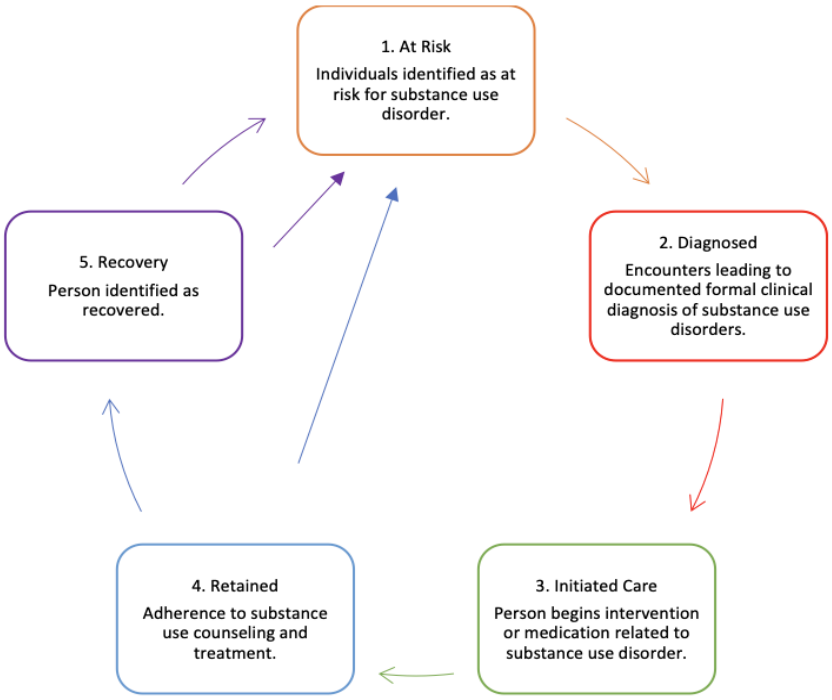

Figure 1. Conceptual Framework for SUD Cycle of Care for SGM People in Hawai'i. (adapted from Yedinak (2019)[94] Cascade of Care for Opioid Use Disorder)

The first stage of care, which focuses on people who are at risk for substance use disorders or dependence, includes preventive care and screening services. The second stage focuses on people who have been diagnosed with SUDs, so treatment efforts shift to providing information and encouragement to seek help. The third stage is initiation of care, during which people enter treatment for SUD. The focus of this stage is to have people feel comfortable with treatment options and guide them to the next stage of the system of care. The fourth stage of care is retention, aimed at people who have stayed with their treatment plan and are on track for the fifth stage of care, recovery. At any stage of care people may return to an earlier stage or exit the SUD Cycle of Care entirely.

To elucidate challenges and opportunities within the SUD Cycle of Care, a cross-system analysis of substance use treatmentnt providers was conducted by chapter co-author and Masters in Public Health student, Annie Do. A linear, progressive pathway model was developed to highlight contributing systems and leverage points at each progressive stage of SUD care for SGM adults. See Figure 2 below.

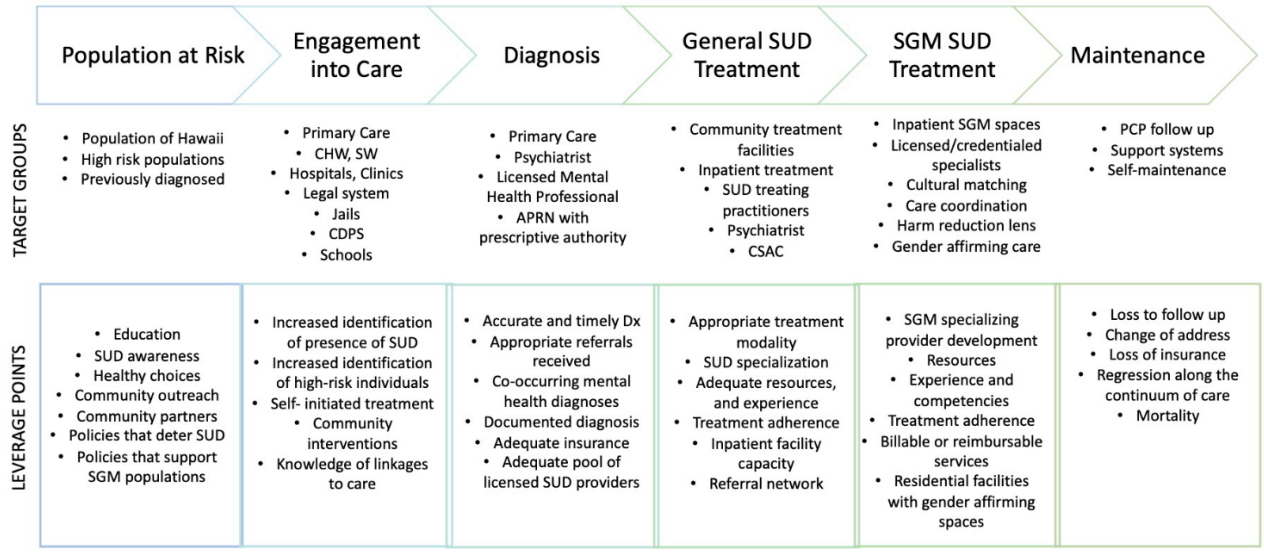

Figure 2. Target Groups and Leverage Points within the SUD System of Care for SGM People in Hawai'i. (Developed by Annie Do with information collected using a cross-system analysis of Hawai'i-based substance use treatment providers.)

Insufficient Literature and Data

Data-driven decision-making and evaluation are essential components of this State Plan, irrespective of population or community. However, there are few data sources (both qualitative and quantitative) available to elucidate the SUD Cycle of Care described in Figure 1. While current literature notes the effectiveness of affirming sexually diverse, transgender and gender non-conforming identities, the existing literature does not specifically explore substance use interventions in sexual and gender minorities (SGM) communities.[95,96] The main findings in academic literature is the need for more grounded SGM-affirming care techniques and preventative measures that can be customized for individual SUD treatment plans.[97,98] Communication, identity affirmation, cultural sensitivity, care coordination and linkage to

complementary rehabilitative services are identified as necessary for best outcomes in substance use treatment.[99] The limited literature on SGM populations in Hawai'i describes a SUD care system that operates in a decentralized manner with loose formalized processes and mechanisms.[100]

The SGM community in Hawai'i encompasses a wide breadth of not only genders and sexual orientations, but also ethnicities and races, indigeneity, socioeconomic histories, immigration status, education, employment, and more. SGM-specific SUD treatments should be able to work additively with culturally sensitive interventions for individuals' varying intersecting identities. Interventions for intersecting cultural identities include those for people who are Asian American or Pacific Islander,[95] Native Hawaiian,[101,102] living with a disability,[103] military veterans,[104] and others.

Future data surveillance and evaluation of substance treatment for SGM people in Hawai'i must integrate more inclusive and responsive metrics to reflect these intersectional complexities. This includes evaluation of each stage in the conceptual SUD Cycle of Care to improve patient engagement, retention, and recovery for SGM communities. The findings of such research should inform development of culturally relevant SGM programs, including the expansion of workforce capacity, as well as justify funding allocation and policy change to improve the SUD Cycle of Care.

Workforce Capacity Gaps

In Hawai'i, there are notable insufficiencies in the behavioral health workforce that address SUD, especially for the SGM population in Hawai'i. Among over 3,500 mental health practitioners holding a license in mental health counseling, marriage and family therapy, clinical social work,[105], or psychology in the State of Hawai'i in 2020,[106] no data was collected on the number that directly provide substance use services for SGM individuals. This number does not include out-of-state practitioners who currently provide services to residents of Hawai'i. Primary care practitioners are often unprepared and lack training for SGM competent care.[99] Although certified substance abuse counselors (CSACs) and certified drug prevention specialists are regulated by the State of Hawai'i Department of Health's Alcohol and Drug Abuse Division (ADAD), but SGM training is not required for either occupational certification. Information on the number of registered CSACs in the State of Hawai'i is not readily available to the public or by request to the Department of Health. Training and education improvements—such as integration of SGM population care into health education care curricula or requiring continuing education—are important opportunities for enhancing the SUD Cycle of Care.

Lack of sufficient provider training and availability for SGM-specific care contributes to a fragmented system of referrals. For example, the Hawai'i Health and Harm Reduction Center (www.hhhrc.org), the largest AIDS-service organization in the Pacific region with 5 licensed medical professionals, 9 social workers, and 2 CSAC trained to work with SGM communities, estimates at least 200 referrals for substance use treatment for SGM identifying patients in 2019. However, it is uncertain whether all referrals led to linkage to care, or if patients linked to care were engaged through the entire SUD Cycle of Care.

The Hawai'i Department of Health's SGM Workgroup has established an SGM Resource Hub that includes a local service directory of healthcare providers who provide culturally competent care (https://health.hawaii.gov/harmreduction/sexual-gender-minority/sexual-and-gender-minorities-

sgm-in-hawaii/). Since the service directory relies on provider or community-initiated listings, it does not provide a comprehensive of list of available resources. Efforts to increase awareness of and participation in the expansion of the resource hub can improve referrals and connections in the SUD Cycle of Care. However, the existing number of SGM specialized SUD treatment centers and care providers is not addressed through this resource hub.

Funding and Coverage Needs

Programs that directly and indirectly serve SGM for SUD treatment often experience inconsistent funding, insufficient grant or insurance reimbursement, and inadequate supply of compassionate, trained care providers. In general, providers, clinics, hospitals, or other service organizations in Hawai'i can apply for state, federal, and foundational grants to fund services related to substance use treatment. These grants typically fund programs that may have limited run operations and are subject to renewal depending on the effectiveness or utility of the services provided. There are some programs that allow for discounted rates on treatment, labs, or medical visits for common co-occurring diagnosis with SUD, although not necessarily for SUD treatment itself.

Currently, the Substance Abuse and Mental Health Services Administration (SAMHSA) grant for the Hawai'i Screening, Brief Intervention and Referral to Treatment (HI-SBIRT) project and The Hawai'i Adolescent and Transitional Aged Youth Treatment Implementation (HI-YT-I) project focuses on substance use prevention and treatment for disproportionately affected populations, including SGM communities. In 2020, the federal Coronavirus Aid, Relief, and Economic Security (CARES) Act provided additional funding for emergency mental and substance use disorders due to COVID-19. It is unclear what proportion of grant funds were allocated or used for SUD care of SGM populations, partly due to lack of data collection and resource tracking of specialized resources.

Insurance reimbursement for SGM-related healthcare should include not only direct SUD services but also related health services such as gender-affirming surgery. Preferred Provider Organization (PPO)insurance plans in Hawai'i allows for certain services to be billed in the provision of transgender care although some surgeries still require out-of-pocket payments or travel outside of Hawai'i. Reimbursable services provided by PPOs depend on provider acceptance of patients' insurance. Insurance provided through Health Maintenance Organizations allows patients to enter an established network of services and care. For example, Kaiser Hawai'i has a board for trans-specific care and surgery, and there are comprehensive HIV/AIDS services provided through the infectious diseases department. Insurance plans contracted through Hawai'i MedQuest plans allow for reimbursement of out-of-network services or medical treatment that require referrals or specialized care related to substance use treatment. Military personnel and veterans are covered through Tricare which includes services at the Veterans Affairs Hospital and Tripler Army Medical Center as well as some services provided by private providers in Hawai'i. Youth and military dependents that seek treatment and care services for mental health related disorders are not covered through this insurance.

Policy Impacts

Many of the gaps in the SUD Cycle of Care System described above are tied to state and organizational policies. Environmental and political factors—including public attitudes towards intersecting issues of houselessness, racism, gender rights, and SGM health—can influence the

availability of resources and capacity for SUD treatment for local SGM communities. To effect sustainable improvements in the SUD Cycle of Care for SGM people in Hawai'i, policy efforts (such as instituting laws or changing Hawai'i Administrative Rules) should be considered. Table 5 below describes some local policies that currently effect the SUD system for SGM people.

Table 5. Select Policies that Influence Effectiveness of Substance Use Prevention and Treatment in Hawai'i

Policy Number	Short Description	Impact on SUD Care
Hawai'i Revised Statutes §431M-4 Mental illness, Alcohol and Drug Dependence Benefits	(a) Alcohol and drug dependence benefits shall be as follows: (1) Detoxification services as a covered benefit under this chapter shall be provided either in a hospital or in a non-hospital facility that has a written affiliation agreement with a hospital for emergency, medical, and mental health support services. The following services shall be covered under detoxification services: (A) Room and board; (B) Diagnostic x-rays; C) Laboratory testing; and (D) Drugs, equipment use, special therapies, and supplies.	Requires certain services to be covered by insurance in the process of providing substance use treatment. This statute allows for costs to be covered; however, it does not require that room and board or hospital services be gender reaffirming or for inpatient facilities to have designated spaces for SGM individuals.
Hawai'i Revised Statutes §431:10A-118.3 Nondiscrimination on the Basis of Actual Gender Identity or Perceived Gender Identity; Coverage for Services	(a) No individual and group accident and health or sickness policy, contract, plan, or agreement that provides health care coverage shall discriminate with respect to participation and coverage under the policy, contract, plan, or agreement against any person on the basis of actual gender identity or perceived gender identity.	Section §431M-4 and §431:10A-118.3 should work in parallel in order to provide covered services to include non-discriminatory spaces and staff, however, this is sometimes not the case.
HCR 162 HD1 SD1 Urging Departments to Collaborate and Collect Data to Address LGBTQI+ Youth in the Juvenile Justice System	Urging the Department of Public Safety and the Department of Human Services to work with the Department of Health, Department of Education, and Judiciary to Submit a Plan to Account for Gender Identity with Respect to Incarcerated and Court-Involved Youth and Work with the Sexual and Gender Minority Workgroup within the Department of Health to Address the Incidence of LGBTQI Youth in the Juvenile and Criminal Justice Systems	This piece of legislation demonstrates the political willpower and commitment to improve health disparities exhibited for LGBTQ+ youth however as a resolution and not an act, this is not to be construed as a mandate. This resolution is a step in the right direction in that it facilitates data collection requirements needed for improved monitoring and insights into SGM populations that would otherwise end up involved with the criminal justice system.
Hawai'i Administrative Rules 11-177.1 Certification standards for Substance Abuse Counselors	"Principle 1: Non-Discrimination. The substance abuse counselor shall not discriminate against clients or professionals based on race, religion, age, gender, disability, national ancestry, sexual orientation or economic condition."	The Hawai'i Administrative Rules (HAR) outlining the licensure and training hours requirements in order to obtain substance abuse certification calls for a certain number of hours to be worked specifically in substance use disorder treatment to be obtained in the process of gaining licensure. There is no requirement calling for exposure or experience for SGM populations to be obtained while in the process, or educational requirements related to population specific treatments.

(Source: Hawai'i Administrative Rules[107])

Interventions

Much of the research on SGM substance use behaviors focuses on risk and protective factors, as well as mental and physical health outcomes related to substance use.[1,2,108] Table 6 outlines specific substance use interventions for SGM individuals, many of which target stages three and four of the SUD Cycle of Care (as described above): initiation and retention. Major gaps in the literature around substance use interventions for SGM populations include: insufficient research for some sub-groups of sexual and gender minorities (e.g., most research focuses on gay and bisexual, cisgender men); Hawai'i-/culture-based interventions for SGM communities; and interventions specifically targeting SGM individuals at levels one, two and five of the SUD Cycle of Care (prevention, education post-diagnosis, and recovery).

Due to insufficient research data on other SGM sub-populations, interventions in this chapter focus on behavior change among gay and bisexual men. Transgender care research was especially lacking in the literature with some interventions lacking in outcome measurements, not actually being interventions, or not being specific to transgender populations.[109] Research focused on lesbian and bisexual women should also be encouraged, especially given the higher rates of alcohol and drug use and elevated risk factors, compared to their heterosexual counterparts.[110] Additional research on interventions for the different sub-populations of SGM communities, particularly lesbian and bisexual cisgender women, and transgender and gender-nonconforming people, are needed to ensure effective local programs.

Table 6. Description and Impact of Selected Substance Use Interventions for Gay and Bisexual SGM People

Intervention	Description	Impact	Source
Outpatient Counseling Focus: gay, bisexual men	12-month outpatient individual and group counseling program	Inconsistent reduction in methamphetamine and/or crack/cocaine use	Ezard, Hodge et al. 2015[111]
Psychosocial Interventions Focus: gay, bisexual man	LGBTI-specific alcohol and other drug treatment, including structured intake interview, standard clinical assessment, psychosocial interventions (up to 12 sessions) with focus on harm reduction principles.	Reduction in methamphetamine use and dependence; Improvement in psychosocial functioning scores	Lea et al., 2017[112]
Esteem Program Focus: young gay, bisexual men	Cognitive Behavioral Therapy (CBT) targeting minority stress	Some reduction in alcohol intake and depressive symptoms, anxiety; no improvements in suicidality	Pachankis, McConocha et al. 2020[113]; Feinstein, Dyar et al. 2019[114]; Pachankis, Hatzenbuehler et al.2015[115]
CBT + Motivational Interviewing Focus: men who have sex with men and are HIV-positive	Motivational Interviewing + Cognitive Behavioral Therapy sessions with supplemental education sessions	Significant reduction in methamphetamine use at the 3-month follow up, with subsequent reductions not being significant (at 6, 9, and 12 months)	Parsons, John et al. 2018[116]

Intervention	Description	Impact	Source
Recovery Housing Focus: men who have sex with men	Provides housing for, regular coaching, and access to treatment services via linkage to an intensive outpatient program; requires regular urine testing	Reduction in recent substance use, post-completion; significant reduction in dysfunctional coping; 35% completion rate	Mericle, Carrico et al. 2018[117]
Project Pride Focus: gay, bisexual men	Small group session interventions aimed at reducing negative mental and behavioral health from minority stress	Large increase in self-esteem; small decreases in loneliness and alcohol frequency; moderate decreases in marijuana frequency, cocaine frequency, and amphetamine frequency	Smith, Hart et al. 2017[118]
Contingency Management Focus: lesbian, gay, bisexual people; men who have sex with men and are HIV-positive	Contingency management (voucher/payments for achieving sobriety or other benchmarks) combined with/without intensive outpatient program (e.g., ARTEMIS positive reinforcement)	No significant reduction in substance use in one study; Some positive effect and reduction in methamphetamine use in others	Zajac, Rash et al. 2020[119]; Allara et al., 2019[120]; Carrico et al., 2018[121]
Project Impact Focus: men who have sex with men	Behavioral activation (BA) and sexual risk reduction (SRR) intervention models	No significant reduction in methamphetamine use	Mimiaga et al., 2019[122]
PACE Bar Study Focus: patrons of gay bars	Providing free water at gay bars	Significantly more bar patrons in the intervention group remained within the alcohol legal limit when leaving	Charlebois, Plenty, et al., 2017[123]

SGM General Health Guidance

Guidelines for developing health and well-being interventions with the SGM community recommend multi-level components that reflect the unique and diverse experiences of SGM communities. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides one such framework for developing SGM interventions and supporting SGM individuals in general programs.[124] At the individual level, assessing provider knowledge, attitudes, and beliefs around SGM individuals is a starting point for professional development that supports this community. At the interpersonal level, providers should use correct pronouns, never assume an identity (gender or sexual orientation), and provide empathetic, supportive care. At the organizational level, it is critical to provide an outwardly welcoming environment for the SGM community, which includes the following: having options for choosing pronouns on intake forms; including a broad range of options for gender and sexual orientation (including an option for other identity not listed) on documentation; having inclusive representation in the waiting area and health promotion materials; displaying signs like the rainbow flag or pink triangle that indicate a safe space for SGM individuals; and having organizational policies and procedures that protect and promote the SGM community. Community-level components include: having a way for SGM individuals to share their voices (and

subsequently impact programs);ensuring inclusive programming where appropriate, with family and external support; and helping SGM individuals access additional support as requested.[124]

SGM SUD Interventions in the Literature

Regarding substance use interventions, research shows that having specific programmatic components for SGM communities is more effective than traditional models for the general population.[101] Promising studies including specific components for the SGM community include recovery housing options, individual and group therapy, and preventive measures in drinking facilities.[116,118,123,125] See Table 6 for more details on study populations and outcomes. The common theme among the active interventions was the provision of comprehensive programming focused on recovery, reintegration, and motivational changes, with a lens on the unique experience of the SGM community (like prolonged minority stress, etc.). Recovery housing showed significant reductions among participants who had various substance use disorders, with a 35% completion rate; this was also the most intensive program because linkage to care and employment opportunities were provided.[125] Other effective models focused on behavior changes and multiple therapy models.[112] For example, the Project Pride program, which used group sessions to address causal factors that influence negative coping mechanisms, showed a moderate decrease in marijuana, cocaine, and amphetamine use.[118] Cognitive behavioral therapy combined with motivational interviewing also had significant reductions in methamphetamine use at a three month follow-up. These were accomplished through a robust program that included one-on-one interventions and educational programs.[116]

SUD Interventions in Hawai‘i

One major gap in the literature review is the lack of studies of Hawai‘i-specific SGM substance use programs. Interventions that incorporate Native Hawaiian cultural practice into substance use prevention and community empowerment provide successful examples of novel and emerging practice.[33] Another opportunity to improve the SUD Cycle of Care for SGM people is through elimination of heteronormative attitudes among staff.[100] Being aware of systemic barriers and biases inherent in the current broader system of care as well as improving policies and provider comfort (e.g., cultural matching) in treating SGM populations can reduce health outcome disparities.

To supplement and contextualize the scant literature available, informal discussions with local service providers and SGM clients throughout the state were convened by the Hawai‘i Department of Health’s SGM Workgroup (see Table 7). Through these discussions, the stakeholders confirmed that there are many programs which implement SAMHSA recommendations and serve the SGM community, but that they are insufficient to address current need statewide, especially for Neighbor Islands. These include, but are not limited to, healthcare facilities like Hawai‘i Health and Harm Reduction Center, Waikiki Health, Lavender Clinic, and Transcend Maui as well as substance use-specific organizations, such as Over the Rainbow AA/NA, Big Island Substance Abuse Center. Client respondents noted the lack of culturally competent care at existing programs and insufficient SGM-specific residential and outpatient programs. The lack of accessible and appropriate resources compelled at least one person to leave the state for SUD care. Sufficient training, workforce development, spiritual and non-secular options, elder services, and data collection were identified

as opportunities for improvement. Although an increase in telehealth capacity may address barriers such as waiting lists or transportation, no mention of this opportunity was made by stakeholders.

Table 7. Stakeholder-Identified Gaps in Substance Use Resources for SGM People in Hawai'i

Gaps in Service	Stakeholder Comments
Gender-Affirming Resources	*"Po'ailani is the only treatment facility that I know of that will house TG [transgender] patients with the appropriate gender."* *"I do not know of any Transgender specific inpatient care options at this point. I would like to see spiritual resources that are competent to support this population also."* *"Often patients are not accepted for residential SUD treatment as the "gender issue" becomes "insurmountable" and they are denied an opportunity to have this level of intervention."* *"Transgender specific meetings. Elder services for seniors unable to get around"*
SGM-Affirming Resources	*"As a lesbian who is in recovery, there's not a ton of resources/providers identified as being LGBTQ friendly…I went out of State for IP [inpatient] treatment for that reason."* *"LGBT in-patient detox/rehab, more variety in groups (i.e. not only 12 step/ non-secular), LGBT culturally sensitive family support, a clear list of LGBT mental health counselors and physicians"* *"There are no SGM "clean and sober" or recovery homes, no residential treatment (although Hina Mauka and Salvation Army allow trans folks to identify which side to stay in) and there are no IOP (intensive outpatient) that is specific to SGM"* *"LGBTQ specific treatments centers and Intensive outpatient programs"*
Workforce Development	*"I see Dr. McKenna and he's going to retire soon. He's been a great ally, but supportive addiction specialty psychiatrists are few and far between in the state."* *"I wish there was more training on how to understand the mindset of substance abuse. As a transgender individual who has not turned to illicit drugs and has had perhaps a mild alcohol addiction at most to which was able to reframe from addictive behavior for 10 years."*
Data Collection and Utilization	*"Data collected on SGM demographics on intake forms, SGM specific services for youth"*
Organizational Capacity-Building	*"SGM training/certification for substance misuse/prevention organizations treating all youth"*
Neighbor-Island Resources	*"specific individual therapists in Kona and Hilo to refer SGM folks to"*

Observations & Recommendations

The diverse and urgent needs of Sexual and gender minorities (SGM) people in Hawai'i are severely under-addressed, especially in the context of substance use. Based on findings above, along with stakeholder feedback collected through informal discussions with the Hawai'i Department of Health Sexual and Gender Minority Workgroup (see Table 7), Table 8 lists observations, recommendations, and opportunities for the Hawai'i Department of Health Alcohol and Drug Abuse Division (ADAD) and its governmental and community partners to promote individual- and systems-level improvements for SGM communities in Hawai'i. Below is a brief summary of recommendations for such improvements.

Service Delivery: Increase Prevention and Treatment Access and Integration (Service Delivery)

As discussed above, although SGM-specific intervention can improve substance use treatment outcomes, limited resources and programs exist in Hawai'i to address the specific needs of local SGM communities. This recommendation thus urges policy changes that expand the current substance use prevention and treatment infrastructure to include SGM-specific services and resiliency-building.

Workforce Development: Recruit Community and Enhance Current Capacity

To improve service delivery to adequately meet the needs of SGM people in Hawai'i, the substance use prevention and treatment workforce must be expanded and appropriately trained. This recommendation thus focuses on the professional development of existing providers, the recruitment of SGM people into the workforce, and the development of policies to ensure worker accountability to quality SGM care (e.g., correct use of pronouns).

Nimble Financing: Allocate Funding and Resources Effectively and Appropriately

Since service delivery and workforce development can be constrained by funding limitations, this important recommendation focuses on identifying and securing sustainable, adequate financing for SGM substance use prevention and treatment. Although categorical funds are useful, this recommendation also encourages flexible financing streams (e.g., unrestricted grants) that can more easily meet community needs.

Data to Action: Improve Data Collection, Evaluation, and Research

An important finding from the literature review is the lack of sufficient data to measure the effectiveness of interventions for SGM communities in Hawai'i. This recommendation proposes more intentional integration of SGM data collection, analysis, and reporting into existing health and social service data systems. Data should include both quantitative and qualitative findings. Research findings should seek to expand study populations beyond cisgender gay and bisexual men.

Policy at All Levels: Transform Systems and Organizational Processes

Effective and meaningful implementation of the recommendations in Table 8 requires policy change at multiple levels, from direct service agencies to the health department to Hawai'i statutes. Ultimately, policy and process transformation will be an important driver for all other recommendations.

Table 8. Observations and Recommendations to Improve the Systems of Care for Substance Prevention and Treatment among SGM People in Hawai'i

Service Delivery: Increase Prevention and Treatment Access and Integration
• Require policy among state-funded agencies providing residential or inpatient treatment to allow self-attestation of gender identity; • Create residential and inpatient treatment opportunities specific for SGM people (e.g., housing staffed by and dedicated to serving transgender and/or gender nonconforming people); • Diversify outpatient support programs to include SGM-affirming and SGM-specific options; • Diversify spousal/family support programs to include SGM-affirming and SGM-specific options (e.g., Family Acceptance Project https://familyproject.sfsu.edu/); • Provide more programs to build resiliency and support for SGM people in Hawai'i to prevent initiation of substance use; • Create social hubs/areas that consolidate resources and also promote safety and support (e.g., gay straight alliances in schools);

- Establish mechanisms to coordinate service delivery between substance use disorder treatment and mental health services; and
- Streamline intake processes to reduce redundancies and improve timely linkage to services.

Workforce Development: Recruit Community and Enhance Current Capacity

- Promote hiring of people from SGM communities at all system of care levels (including ADAD and its contracted entities);
- Provide professional development for new and existing substance use treatment providers, allied health professionals, social workers, case managers, administrative intake staff, and other relevant workers to provide competent care for SGM people in Hawai'i;
- Mandate annual SGM cultural trainings for relevant workers (e.g., Center of Excellence on LGBTQ+ Behavioral Health Equity https://lgbtqequity.org/);
- Integrate workforce development activities for schools, Department of Education, and other youth-oriented programs; and
- Communicate and enforce protections for SGM staff, clients, and others through clear and actionable policies at all levels.

Nimble Financing: Allocate Funding and Resources Effectively and Appropriately

- Develop incentive programs to recruit new and experienced providers for SGM-specific care and treatment;
- Fund workforce development through ongoing evidence-led trainings and mentorship opportunities;
- Fund SGM-specific treatment options in all island counties for both urban and rural settings;
- Establish and maintain an SGM Coordinator position within ADAD to solicit community feedback and coordinate systems-level services to improve care and treatment;
- Fund SGM-specific innovation grants to reflect cultural and community needs and particularities; and
- Fund SGM-specific health promotion, stigma reduction, and awareness materials and efforts (e.g., anti-tobacco initiatives to counteract SGM-targeted campaigns) to promote increased engagement with substance use prevention and treatment.

Data to Action: Improve Data Collection, Evaluation, and Research

- Conduct needs assessment through focus groups to determine specific needs of SGM communities, which will direct and inform proposed recommendations throughout this chapter;
- Integrate sexual orientation, gender identity, and sex assigned at birth as separate demographic fields in Web Infrastructure for Treatment Services (WITS), the shared treatment record portal for ADAD. Recommended language can be found at https://www.cdc.gov/hiv/clinicians/transforming-health/health-care-providers/collecting-sexual-orientation.html;
- Improve data collection to align electronic health records and similar health-related systems with guidelines from the National Institutes of Health (https://dpcpsi.nih.gov/sgmro/measurement/questions);
- Collect and report qualitative data (e.g., photovoice project) on SGM communities to provide better contextual grounding of quantitative data;
- Mandate the collection and report of the three metrics above in WITS, or any other reporting system for all contracted ADAD services;
- Develop an annual special report on SGM data among ADAD contracted entities to highlight impact of programs, gaps in service, and recommendations for program improvement;
- Expand mandated integration, collection, and reporting of the three metrics above into all non-ADAD entities providing substance use treatment services (e.g., hospitals, FQHCs, MedQuest providers/clinics, insurance payers) through ADAD technical assistance;

- Develop and implement mechanisms for staff and participant feedback (qualitative and quantitative) on ADAD contracted entities, with intentional inclusivity for SGM people and SGM-specific issues; and
- Develop and implement an internal ADAD workgroup (in partnership with the DOH Sexual and Gender Minority Workgroup) that seeks SGM community input to identify and implement culturally-based evaluation approaches and practices (e.g., the Aloha Framework from Culturally Relevant Evaluation and Assessment in Hawai'i (CREA-HI): https://www.creaHawai'i.com/resources).

Policy at All Levels: Transform Systems and Organizational Processes

- Update workflow to include culturally appropriate assessment for SGM people, including preferred name, pronouns, and other identities (see recommendations on SGM metrics in Evaluation and Research section);
- Update or implement mechanism for actionable, safe, and accessible reporting of SGM discrimination in ADAD-contracted entities;
- Develop and implement ADAD protocol for quickly responding to SGM discrimination reports, including funding or program sanctions;
- Require inclusive language for SGM people in health practice settings;
- Require the collection and reporting of SGM data in health practice and substance use treatment settings;
- Support legislation or policy that promotes inclusiveness for SGM people in all settings, such as:
- Protection of transgender athletes in school teams;
- Coverage of transgender healthcare services by insurance payers;
- Establish and fund a State Executive Office to address the needs of Sexual and Gender Minority (similar to the Hawai'i State Commission on Status of Women); and
- Develop legislation or policy changes to ensure that the above recommendations are mandated and implemented in all substance use treatment settings, regardless of ADAD funding.

Summary Conclusion

Sexual and gender minorities (SGM) populations are disproportionately affected by substance use disorders, with differential use of specific substances among persons based on sexual or gender identity, compared to non-SGM counterparts. Substance use and misuse among SGM people are tied to risk and resiliency factors at all levels of the social ecological paradigm, from individuals to interpersonal to communities and societies. The concept of minority stress suggests that the collective stressors experienced by marginalized communities due to their minority status (e.g., discrimination, micro-aggressions) can lead to coping mechanisms that include substance use. An important component of the minority stress model to emphasize is resiliency, which highlights the existing and developed strengths of SGM individuals that can be leveraged to promote quality of life and well-being.

Despite the disproportionate burden of substance use disorders on SGM people in Hawai'i, very few resources or programs exist to ameliorate the impact of substance use on this community. Existing resources rarely focus on enhancing strengths evinced by many SGM individuals. Although some models of care could be useful for SGM people, community-specific interventions in Hawai'i are scarce, especially for gender non-conforming people as well as lesbian and bisexual, cisgender women, among others. Meaningful changes must address culturally appropriate service delivery; workforce recruitment and development; nimble and adequate financing; consistent data collection

and reporting; and systems-level policy updates. To successfully meet the needs of SGM people in Hawai‘i, multi-level transformation of the substance use prevention and treatment landscape, with particular focus on resiliency-building, is needed.

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Implications for a System of Care in Hawai‘i: Primary Care Integration of Substance Use Disorder Treatment

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Abstract

Primary care physicians (PCPs) in Hawai‘i face many challenges in treating patients with substance use disorders (SUD) who tend to have higher medical complexity and thus require more resources. PCPs play a vital role in identifying early misuse, integrating care for patients with SUD including office-based interventions like medication-assisted treatment, and connecting patients to community treatment programs. In addition to enormous burdens to care for large and increasingly complex patient panels, other challenges include lack of education on addiction medicine, insufficient resources and SUD treatment programs in the office and community, low reimbursement for the complexity of care provided, and an overall physician shortage which drives higher patient volume in less time for any given physician. This chapter suggests responses to address these challenges such as providing more training and continuing education in SUD for PCPs and trainees, enhancing team-based care to better support PCPs, and funding more SUD treatment programs to refer patients to. More funding should widen accessibility to treatment and reduce the overall burden on the healthcare system by preventing and treating the disease early, which is a core principle of primary care. Additionally, incentives to practice in Hawai‘i in primary care, and especially to treat patients with SUD, need to be improved. Such steps must be taken to address the overall physician shortage that results in limiting patients’ access to SUD treatment. A collaborative care model between PCPs, care managers, and addiction specialists is an example of an integrated care system that may address many of these challenges in the short term. To truly improve care for all in Hawai‘i, however, system wide interventions are essential to increase the incentive for PCPs to remain and practice in Hawai‘i to take care of its unique population, including those dealing with SUD.

Background & Introduction

Miles away from the continental United States (US), Hawai'i, the most racially, ethnically, and culturally diverse state, has been battling substance use disorder (SUD), especially methamphetamine, for decades.[1] According to NSDUH 2018-2019, 68.2% of the population of Hawai'i used illicit drugs, tobacco products, or alcohol in the past year. Sixty-six percent of the people of Hawai'i used tobacco products or alcohol in the past year and 19.9% used illicit drugs in the past year.[2] Due in part to its geographic isolation, Hawai'i faces many challenges including shortages in primary care physicians (PCPs) and addiction treatment resources, leading to difficulty in providing adequate care for patients with SUD. Since substance use is common and can lead to a multitude of health issues, PCPs play a vital role to assist patients with SUD as the first entry point to healthcare for most people. By identifying and managing problematic substance use early, PCPs can make a significant impact on healthcare outcomes though there are a number of barriers to achieving this aim. As part of the Hawai'i Department of Health Alcohol and Drug Abuse Division State Plan which examines the intersection of substance use and primary care this chapter will focus on the challenges PCPs face and recommendations to attempt to alleviate the situation. For more background and context around the overall State Plan project, readers are referred to the introductory chapter. Although challenges discussed in this manuscript are primarily physician focused, many of these also apply to other healthcare providers who practice in the primary care setting, such as advanced practice providers. Primary care-based interventions such as early screening and medication assisted treatment (MAT) will be emphasized in this chapter since these are available tools for PCPs. We will also describe a collaborative care model between PCPs, care managers and addiction specialists, which is an example of an integrated care system that would address many of the current system's challenges.

Current System of Care in Hawai'i: challenges and interventions

In order to better understand the current system of care and needs related to substance use, a literature review was conducted, and input and feedback was obtained from stakeholder groups which included community primary care providers, representatives from the administrative aspects of the system (i.e., pharmacy, billing and coding), behavioral health provider network, resident training programs, and the Department of Health Alcohol and Drug Abuse Division. These sources were incorporated into determining the scope of the issues and describe the needs in the system of care. Below, challenges in the current system of care and corresponding interventions are organized and described together.

Challenge #1: Need for Better Physician Education and Support to Manage Patients with SUD

Training for physicians to motivate behavioral change and address addictions is historically lacking. Medical school unfortunately often does not provide adequate education in Screening, Brief Intervention, and Referral to Treatment (SBIRT), motivational interviewing (MI), and

substance use education. According to a report from the Surgeon General, only 8% of medical schools had a separate required course on addiction medicine and 36% had an elective course.[3] More recently, medical schools have started to implement proper opioid management and treatment for opioid use disorder but lack of faculty expertise continues to be one of the major obstacles.[4,5] For postgraduate training after completing medical school, the average required hours for substance use training during a three-year residency for family medicine, internal medicine, and pediatric residents were only 12 hours, 5 hours and 4 hours respectively.[6] This limitation in training is reflected locally in the number of clinicians licensed to prescribed buprenorphine: there are currently 159 healthcare providers (no available data to determine specialty) listed on the Substance Abuse and Mental Health Services Administration (SAMHSA) Buprenorphine Practitioner Locator for the state of Hawai'i, compared to 3,290 physicians actively practicing in the state.[7,8]

The Hawai'i SBIRT Project progress report identified several common challenges among PCPs in Hawai'i related to lack of infrastructure and support. One challenge included difficulty securing buy-in from small private offices to train staff to provide SBIRT, with time needed for training and lack of capacity to have in-house behavioral services cited as primary barriers. For neighbor island PCPs, limited outpatient and inpatient treatment services to refer to are a significant limitation, as identifying a problem without the ability to successfully refer for treatment is not beneficial for patients. Another systems level challenge is lack of standardization in electronic health record (EHR) programs since modifying EHRs to enable implementation of SBIRT would require significant financial and IT resources.[9]

In addition to lack of education and the other systemic problems discussed above, stigma and discrimination by healthcare professionals toward patients with SUD is well described in the literature and can result in suboptimal health care. For example, there is an on-going negative attitude toward evidence-based treatments such as prescribing MAT for SUD among PCPs,[10] especially among those who lack confidence to provide treatment.[11] Additionally, treatment options for methamphetamine, one of the most commonly abused substances in Hawai'i, are severely limited. There are no Food and Drug Administration (FDA) approved MAT options for methamphetamine and successful treatment requires a significant investment of time and behavioral resources not readily available for most PCPs.[12]

Interventions for Challenge #1: Need for Better Physician Education and Support to Manage Patients with SUD

Education is essential to treat patients with SUD because it leads to less stigma and more confidence in substance abuse treatments.[13,14] PCPs are more likely to offer addiction treatment after receiving education and support from initiatives that promote increasing access to SUD treatment.[15] Telehealth or telephone visits are useful methods to decrease stigma and increase access to care for all patients, especially those in rural/underserved areas.[16] Patients with SUD often report feeling discrimination in PCP offices,[17] leading to discouragement to seek medical help. Staff attitudes also contribute to stigma which telemedicine can alleviate by limiting the incidental interactions and contact that would occur in a physical waiting room.[18] Studies show that telemedicine is an effective method to manage SUD patients by improving follow-up rates and treatment completion leading to overall improved outcomes.[19-21] Since the COVID-19 pandemic, reimbursement for telemedicine has improved which the authors strongly advocate should continue indefinitely.[22] PCPs can implement brief interventions and refer patients to

behavioral health specialists for ongoing therapy since most do not have adequate time or training to administer cognitive behavioral therapy (CBT), proven treatment for SUD, including methamphetamine use disorder, directly.[23]

As stated above, SUD treatment program shortage is a serious problem in Hawai'i.[24] To increase accessibility for proven SUD treatment such as MAT, the Drug Enforcement Administration (DEA) recently waived the requirement of a separate registration for mobile components of registrants approved to dispense narcotic drugs in schedules II-V (includes methadone) at remote location(s) for the purpose of maintenance or detoxification treatment. These revisions to the regulations are intended to make MAT treatments more widely available,[25] which provides additional referral sites for PCPs. MAT is shown to decrease substance use, overdose death, criminal activity, and infectious disease transmission.[26] Although, receiving MAT treatment in PCP office may be most ideal, accessible treatment of MAT will provide additional referral sites for PCPs who may feel uncomfortable dealing with MAT or too busy to provide MAT.

Challenge #2: Low Incentive to Care for Patients with SUD

To care for those at risk of SUD or suffering from SUD, the U.S. Preventive Services Task Force (USPSTF) recommends universal screening for substance use for anyone age 18 and over while the American Academy of Pediatrics recommends a universal screening approach for adolescents.[27,28] Primary care offices are the ideal setting to provide this screening service for early detection and intervention. Screening by itself however is insufficient.[29] Several different models exist for acting on positive screening results. Screening, Brief Intervention, and Referral to Treatment (SBIRT) has been extensively studied, proven to improve patient outcomes, and has the flexibility and feasibility for implementation in the primary care setting.[30-33] Motivational interviewing (MI) is another evidence-based tool that can help to elicit change in a patient's risky behavior leading to potentially healthier lifestyles.[9] Practicing SBIRT and MI enables PCPs to detect and intervene on patients with mild to moderate symptoms, preventing conditions from worsening or developing in the first place.[34,35]

According to Venner, et al., however, only 25% of primary care offices practiced universal screening for alcohol and illicit drug use.[34] There are many reasons cited for why SBIRT or other interventions are not routinely conducted including PCP workload, lack of training and low reimbursement for the time spent.[36,37] Yoast et al[38] report that "reimbursement has been a commonly identified barrier to physicians' ability to address SUD concerns with their patients." In Hawai'i, the state's largest medical insurance company Hawai'i Medical Service Association (HMSA) Health Maintenance Organization (HMO) now operates on a capitated payment model, meaning most PCPs get paid a fixed amount per member per month (PMPM) regardless of number of visits or time spent for most patients, typically $25. The PMPM rate can change, however, if the patient is more medically complex or at risk for worse health outcomes based on disease burden and certain social determinants. However, documenting the codes correctly is itself a highly onerous task for physicians and the exact increase in PMPM based on the codes is often not transparent.[39] This high administrative burden combined with decreased value placed on primary care services has led to high rates of burnout among PCPs which is associated with an overall decrease in quality of care. Incorporating screening and treatment of SUD in addition to routine preventive care and other health needs into a 15-minute office visit is a constant struggle for PCPs.

Among those who had illicit drug/alcohol dependence or abuse in the past year in Hawai'i, 30.1% had Medicaid/QUEST plans.[2] Follow-up rates for these patients are poor for a variety of reasons, including factors related to social determinants of health such as transportation barriers and decreased access from clinicians who accept Medicaid. Patients with SUD need frequent follow-ups, especially those who are on Medication Assisted Treatment (MAT), with studies showing an increase in primary care visits for such patients but a decrease in overall healthcare costs due to less acute care utilization.[40] An external quality review of QUEST Integration Health Plans showed that follow up care after emergency department (ED) visits for alcohol or drug abuse / dependency within 7 days for their patients was poor, with scores between 2-3 stars (highest, 5 stars) compared to national standards.[41] Per National Committee for Quality Assurance (NCQA), the majority of QUEST Integration Health Plans in Hawai'i are rated 1-2 stars under items "Getting Needed Care" and "Getting Care Quickly" by its members.[42]

Interventions for Challenge #2: Low Incentive to Care for Patients with SUD

Screening for SUD is the vital first step to initiating treatment. Locally, Department of Health, Alcohol and Drug Abuse Division has conducted training for SBIRT implementation among primary care offices throughout the state, including on O'ahu, Maui, Kaua'i, and Hawai'i Island, with promising results. A progress report on the Hawai'i SBIRT Project showed that providers trained in SBIRT gained skills and increased their capacity for SBIRT use in the community. This report also found that having organizational champions to support leadership, promote use of SBIRT, and obtain resources were key factors in enhancing sustainability of SBIRT. (Tomioka, et al., 2020; SBIRT provider survey: Summary of findings. A progress report on Hawai'i SBIRT Project, 2017 - 2020, submitted to the Alcohol and Drug Abuse Division, Department of Health, State of Hawai'i).

Education alone however may not be sufficient to implement SBIRT and other screening tools in the PCP office. Palmer et al,[43] discussed various barriers for PCPs such as time constraints to perform SBIRT. Referral to treatment programs was frequently perceived as a challenge by PCPs, in part due to a local shortage of such programs especially on O'ahu's neighbor islands.[24] Aside from insufficient training, minimizing other barriers such as lack of dedicated staff and time to provide SBIRT and need for additional reimbursement may lead to greater use of SBIRT.[43] To provide adequate care for those who may be suffering from SUD or at high risk of SUD, increased reimbursement and dedicated resources are important interventions for improving screening rates. Adequate financial support for physicians would also support workflow enhancements to improve the consistency of SBIRT procedures, alleviate time constraints,[43] and may provide physicians time to receive training.

Challenge #3: Primary Care Physician Shortage

According to the 2020 Hawai'i Physician Workforce Report, more than 400 PCPs are needed across Hawai'i to meet the demand,[7] resulting in enormous burdens on existing PCPs to care for large and increasingly complex patient panels. The ideal PCP panel size is difficult to estimate, but according to Altschuler et al, in a non-delegated model (e.g., physician completes majority of tasks instead of delegating work to non-physician staff) a manageable volume is 983.[44,45] Hawai'i Medical Service Association (HMSA) Health Maintenance Organization (HMO) currently sets an ideal number of patients for each PCP as 1,500. In addition to current shortages, Hawai'i's pool of physicians is in the "older" age group, where 46% are at least 55 years old with many expected to

retire in the next 10-15 years. Therefore, without major intervention, not only PCPs but a shortage of all physicians will worsen in the future.[7]

Interventions for Challenge #3: Primary Care Physician Shortage

A full discussion on increasing physician retention and compensation, especially for PCPs, is outside the scope of this chapter. However, it is impossible to discuss improving primary care integration for substance use treatment without fully understanding the current state of primary care and the healthcare environment in Hawai'i. Nationally, medical students are less interested in going into primary care for a variety of reasons including low income compared to specialist peers and high administrative burden.[46] Hawai'i has one of the highest costs of living nationally, yet simultaneously is one of the worst states for physicians in terms of pay, ranking 5th worst in the nation for lowest average annual wage for physicians in 2021.[47,48] New physicians with accumulated debt from medical school and residency training are more likely to move to more affordable states where the pay is higher to enable faster payment of debt. Increasing incentives, such as loan repayment programs may play a role in physicians' choice geographic practice location.[49] Rourke (2008) suggests some factors for increasing the number of physicians includes increasing numbers of medical students from the area, stable practices with appropriate facilities and health care teams, functional referral networks and improved financial incentives for practicing in the area.[50]

Education appears to be another key factor in recruiting and retaining physicians in the area[51] including incorporating medical students and residents into clinical practices. Fortunately, Hawai'i has its own medical school and several primary care residency programs. Over the past 10 years (2010 – 2020), the retention rate of graduates from Hawai'i training programs practicing as PCP in Hawai'i has varied greatly from 11.8% to 64.8%, depending on the program and specialty. On average, 35% of Hawai'i residency /fellowship graduates practice as PCPs in Hawai'i (Table 1).

Table 1. Number of Graduates from Hawai'i Residency Program Practicing as PCPs in Hawai'i (right after graduation).

		Years	Number of Graduates	Practicing PCPs in Hawai'i	Retention % of Graduates
Internal Medicine Residency Program	Kaiser*	2018-2020	12	4	4/12 = 33.3%
	University of Hawai'i at Mānoa (UH)	2011-2020	160	19	19/160 = 11.8%
	Tripler Army Medical Center (TAMC) (civilian slots)	Data not obtained	N/A	N/A	N/A
Family Medicine Residency Programs	Hilo*	2017-2020	14	11 (6 in Big Island)	11/14 = 78.6%

	UH	2011-2020	74	48 (8 are in the Big Island, 5 are in Kauai)	48/74 = 64.8%
Obstetrics and gynecology (OBGYN) Residency Program	UH	2011-2020	59	24	24/59 =40.7%
Pediatric Residency Program	UH	2011-2020	69	26	26/69 = 37.7%
Geriatric Fellowship Program	UH	2011-2020	62	26	26/62 = 41.9%
Addiction Medicine Fellowship Program	UH*	2020-2021	2	2 (practicing as addiction specialist)	100%
Total (Addiction Medicine Fellowship NOT included (not PCP))		2011-2021	450	158	158/450= 35.1%

Data provided by respective programs. These data are at the time of graduation
*10-year data not available for these newly established programs
**Disclaimer: Internal medicine graduates have the lowest rate of practicing as PCPs in Hawai'i after graduation. Most of the graduates from internal medicine go on to fellowship for extra training to become specialists. Though some of these specialists may also practice as PCPs, they are not included as PCPs in this data. Some internal medicine and family medicine graduates become hospitalists taking care of acutely ill patients who are admitted in the hospital. They are also not counted as PCPs in this data.

Interventions for Challenges # 1-3: Collaborative Care Model

A collaborative care model integrating PCPs, recovery coaches and addiction specialists can address the majority of the issues described above, such as lack of education/training, physician shortages and limited MAT / SUD treatment program availability. A study by Wakeman et al in 2019[52] showed that an intervention linking PCPs and patients with recovery coaches and addiction specialists led to significantly more primary care visits during the 9 month follow up period, along with fewer emergency department visits per 100 patients and fewer total inpatient bed days. For the intervention group in the study, interdisciplinary teams were organized into groups including PCPs, nurses, administrative staff and recovery coaches. This team met twice a month to discuss care plans of complex SUD patients where an addiction specialist not only provided input about the patients but provided support and education for the team. Recovery coaches played a major role in supporting patients and facilitating referrals to treatment. The control group on the other hand did not have recovery coaches or integrated addiction treatment within the practice. The study suggested the expected benefits in one year for every 1000 patients with SUD is expected to be 98 fewer hospital days and 90 fewer ED visits, with an additional 627 primary care visits. The study also showed an increase in MAT when an addiction specialist provided education and support.[52]

The Substance Use Motivation and Medication Integrated Treatment (SUMMIT) study, a randomized trial conducted by Watkins et al.,[53] clearly showed that collaborative care (CC) for opioid and alcohol use disorder increased treatment use and self-reported abstinence compared to traditional primary care. In the CC group, all treatment progress was tracked and reviewed during the team meetings. The patients in CC groups received a prompt by coordinators reaching

out to them when appointments were missed. Participants in traditional care were only given a phone number for making appointments and a list of community/clinic treatment referrals. Collaborative care integrated into primary care for substance use treatment resulted in improved patient outcomes.[53]

Hawai'i has already implemented similar integration systems between PCPs and mental health providers. Queen's Clinically Integrated Physician Network (QCIPN) Collaborative Care Model (CoCM) is one such system. Being part of QCIPN allows PCPs to participate in team-based mental health care involving a psychiatric consultant. The team also has three full time care managers (CMs) and two social work assistants. When patients are referred for psychiatric consultation, the CM initially interviews the patient, typically via Webex or phone. The CM then presents the case to the psychiatrist at the weekly meeting. Based on the CM report, the psychiatrist gives their diagnostic impression and treatment recommendations. Phone calls are made directly to the PCP as needed. The CM regularly follows up with the patient by phone, which includes providing counseling to keep the patient engaged in treatment and tracking progress using anxiety and depression scales as applicable.

The team-based approach supports PCPs to work more efficiently while also focusing on higher complexity patients, enables CMs to address the social determinants of health that are crucial to recovery and empowers all team members to work at the highest level of their licensure. Extending this care model to patients with SUD through the involvement of addiction specialists would address many of the challenges listed previously.

A panel for one full time CM is estimated to be up to 50 SUD patients at any given time. Estimating that these patients require an average of six months follow up, one full time CM is capable of serving 100 patients per year.[54] Preliminary data by QCIPN shows encouraging results despite possible underutilization of the program, including a decrease in emergency room visits, hospital admissions and readmissions among those who are under the care of CoCM[55] which results in significant cost savings for the entire healthcare system.

Recommendations

The following recommendations are proposed as part of a larger group working on Systems of Care Integration for Substance Use in Hawaii. These recommendations were based on the synthesis of the existing literature, interventions, feedback from members of the 2022 Hawai'i Academy of Family Physicians and from the 2022 Hawai'i Addictions Conference. In particular, discussions with the QCIPN (behavioral health provider network) were important in arriving at recommendations involving the collaborative care model. These recommendations were also reviewed and vetted by key stakeholder groups which provided information around the existing challenges.

Recommendation for Challenge #1 - Need for Improved Physician Education and Support to Manage patients with SUD: Improve Clinician Education to Optimally Manage Patients with SUD

The authors recommend providing education and additional resources for PCPs to take care of patients with SUD. This includes, establishing a website where busy PCPs can obtain information immediately and quickly to prescribe MAT at the point of care, and short webinars for useful tools

to treat SUD. Offering continuing medical education (CME) credits may further incentivize providers to utilize these educational resources. Collaborating with the current free weekly Hawaii State Rural Health Care Association project ECHO (Extension for Community Healthcare Outcomes) may be ideal. Sessions can also be offered as live in-person workshop format, for example through the annual statewide Hawai'i Addictions Conference. The authors additionally recommend that these topics be mandatory for residents in all Hawai'i primary care residency programs, along with DEA X-waiver training for buprenorphine, so that new physicians are optimally prepared to manage SUD at the start of their careers. We also recommend that our medical school incorporate these topics into the standard curriculum. Further methods to support PCPs could include a non-emergent email/phone line to access advice from an addiction team such as the Hawai'i Society of Addiction Medicine (HSAM). One of the major obstacles to provide this education/support however is financial; keeping the course modules up to date, providing a help desk function, organizing courses, and contacting speakers puts a high burden on all involved.[56] Primary care practices can continue the use of telehealth where appropriate as it is a helpful tool to bridge care gaps. In order to maintain telehealth services in primary care, stable funding and reasonable reimbursement for physicians need to continue at the same rates as office visits even post COVID-19 pandemic.

To expand the availability of treatment programs, funding mobile clinics is proposed so that MAT, especially methadone will be available for all islands. Unlike other forms of MAT, patients must go to the clinic daily to obtain methadone (federal law),[57] therefore having clinics at a reasonable distance is essential. Currently, there is no clinic that can dispense methadone for opioid use disorder (OUD) on Kaua'i, Moloka'i and as for Oahu, Big Island and Maui, these clinics are available only in Honolulu, Hilo, and Wailuku respectively. Methadone is a full opioid agonist and studies have shown better retention rate as compared to buprenorphine, a partial opioid agonist which can be filled as a regular prescription.[58] Increasing accessibility of MAT will provide additional sites and support PCPs can refer their patients to for treatment.

Recommendations for Challenge #2 - Low Incentives and Resources to Care for Patients with SUD: Incentivize Care for Patients with SUD

The authors recommend a more comprehensive system of care, including better reimbursement rates and more resources for wraparound care that would be provided by care managers or patient navigators for example, to screen and provide brief intervention to patients with SUD or at risk for SUD. As suggested by the current literature, increasing reimbursement would allow PCPs to have additional support staff for administrative tasks and addressing social determinants of health thus freeing up more time for counseling and treating higher complexity SUD patients. As for HMSA HMO patients, an increase in base PMPM as well as transparency in payment increases may improve motivation for PCPs to spend more time and schedule frequent follow up visits with their more vulnerable patients. The authors would also propose higher PMPM for all complex patients, including those who were started on MAT, who typically require more office visits, counseling, and coordination of care. Payers should provide additional incentives and reward physicians who care for medically and socially complex patients, such as those with SUD, as high-quality primary care for these individuals leads to decreased costs for the system in total.[59]

Recommendation for Challenge #3 – Primary Care Physician Shortage: Increase Interest, Incentives, and Funding to Build Primary Care Workforce

The authors recommend increasing incentives for primary care physicians to work in Hawai'i. Examples to accomplish this aim include expanding loan repayment, scholarships, and other incentive programs to encourage physicians to practice in Hawai'i. Higher reimbursement would lead more students to pursue primary care fields and more residents to stay local after completing training. Expanding number of trainees in primary care residencies may also increase PCPs in Hawaii, though funding to train them is an obstacle. Increasing interest among local high school/undergraduate students in the medical profession would also increase the physician workforce with ties to Hawai'i and improve the physician pipeline. Examples include expanding current summer sessions and research opportunities sponsored by various institutions in Hawai'i.[60,61]

Recommendations for Challenges #1-3: Collaborative Care between Primary Care and Addiction Specialists

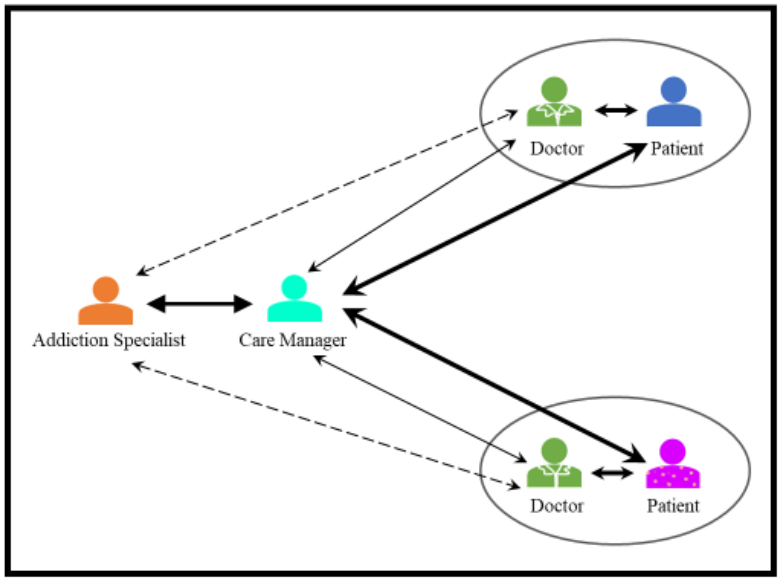

Figure 1. Diagram of Proposed Integrated Addiction Specialist and PCP Clinic: Collaborative care. Line thickness corresponds to frequency and depth of the encounter. Diagram by Micaiah Cape.

Adapting the existing QCIPN CoCM model by substituting psychiatrists for addiction specialists will increase access to addiction care (Figure 1). It is uncertain at this time how many full-time primary care practices can be covered by one full time CM. Due to lack of education and training to take care of SUD patients among PCPs, the numbers of referrals may be higher initially. Such collaboration would expand the use of MAT for opioid use and alcohol use disorders among PCPs and improve access for patients.

This model can be implemented first on O'ahu within the major health systems and their affiliated PCPs who use the same electronic medical record system. Addiction specialists eventually can also serve the neighbor islands via virtual meeting platforms.

The final recommendation is an integration of PCPs and addiction specialists at methadone clinics that serve OUD patients. In a recent study, methadone patients having a designated PCP were associated with a roughly 50% reduced risk of having 2 or more ED visits in a year. [41, 62] Having a co-located PCP within methadone clinics would also likely lead to more consolidated and coordinated care for patients' SUD and primary care needs.

Table 2. Potential benefits of integrating addiction specialists and PCP

Challenges	Potential benefits of integrating addiction specialists and PCP			
	From Patients' Perspective	From PCP perspective	From Addiction Specialist perspective	From Social Perspective
Challenge #1: Need for Improved Physician Education and Support to Manage Patients with SUD	Receive overall improved quality and more comprehensive care	Receive necessary support and education to take care of addiction patients	Provide training opportunities for PCPs and their staff	Improve addiction treatment outcomes
Challenge #2: Low Incentive to Care for Patients with SUD	Increase access to addiction treatment in PCP setting	Provide comprehensive care for patients Reduced burden on PCPs to independently manage SUD	Can manage patients with higher level of complexity to offset PCP burden	Decrease stigma for patients with SUD to receive support
Challenge #3: Primary Care Physician Shortage	Increase access to PCPs for general medical care	Increase efficiency in providing care and allow PCPs to manage more conditions	Provide care for larger number of patients	Reduce overall healthcare costs by increasing access for earlier detection and treatment

Conclusion

Primary care physicians (PCPs) in Hawai'i face many challenges in managing patients with substance use disorder (SUD) to prevent adverse health and social outcomes. Issues outlined in this chapter include: a need for better training in SUD, inadequate resources to support physicians (such as SUD treatment program shortages,[24]), disincentives to manage patients with SUD, and a significant physician shortage that is worse among PCPs.[7] All of these combines to place heavy burdens on currently practicing physicians as well as advanced practice providers. Hawai'i's access to follow up especially for those with SUD is subpar and funding SUD programs and telemedicine will provide wider access to SUD treatment. PCPs also need a supportive environment and adequate education for them in order to take care of patients with SUD early before problems multiply as the physician shortage worsens. Collaboration between PCPs and addiction specialists is a model that would address many of local challenges in Hawai'i in the short term including increased access to care for patients and more support for PCPs. To truly improve care for all in Hawai'i, however, systemic interventions such as adequate reimbursement, loan re-payment programs and rewards to manage complex patients including those with SUD, are essential to increase the incentive for PCPs to remain and practice in Hawai'i to take care of its unique population.

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